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MAJOR OBJECTIVES IN HOME ECONOMICS[1]

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Freely interpreted, the major objectives of home economics teaching may be considered as three in number: to give an understanding of the function of the home, to indicate possible sources of useful information regarding present day homes, and to provide training in the processes of homemaking.

Giving the student a point of view regarding the social function of the homes in which we live here and now, includes also an indication as to which factors in homemaking are most susceptible of control. One sometimes feels that too many teachers lack conviction on these points, and this is little wonder when we face the numerous cross currents of thought. However, unless we are ourselves convinced that the home is an indispensable social institution having certain minimum requirements for effectively fulfilling its function and that certain factors are, in part at least, controllable, we can scarcely convince students on these points and our teaching is devitalized by that much. This does not rule out adaptability, open-mindedness, readiness to adjust to new conditions, nor a frank facing of the enormous number of problems with which the present-day home is confronted, but gives us a certain thesis which lends force and vigor to all our teaching.

At the present time fiction writers constitute almost the sole group which unhesitatingly discusses the social problems of family and home life; while some of their implications may be sound, there must be in the subject-matter fields of psychology, economics, ethics, and sociology, more trustworthy guidance. It is surely appropriate that home economists have a part in collecting, interpreting, and evaluating such information as is available, since part of our responsibility is undoubtedly to make students conscious of the complex world they live in and to help

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them to establish standards for the home based on the best information available.

We can also assist students to adjust their thinking to changing situations and to realize that while there are some values which will doubtless persist always, the home need not be static and can be adjusted to a changing world without losing essentials.

The second major objective suggested is that we furnish to the student information calculated to acquaint her or him (and I believe we will increasingly draw boys and men into our classes by the acceptance of certain standards as suited to the rôle of the present-day home) with possible sources of additional information, and indicate the persons and institutions engaged in investigations along these lines in order that the student may keep step with progress after leaving the so-called halls of learning.

Since we have left behind us the concept of education as a pouring-in process and have accepted new and more comprehensive definitions in which "growth," "insight," "far-sightedness," "judgment" and kindred words have an important part, we find ourselves watching the student with keen interest, eagerly seeking ways of making her more resourceful, more self-reliant, more ready to consider her education a life-long process. At this point home economics has an enviable position, since the student is almost certain to have her training re-enter her experience at many points during her life time and she has an excellent opportunity for growth if she will keep in touch with opportunities for education.

The third objective, as I see it, is to give training in the technique of manual processes likely to be a part of homemaking, where such processes have been studied and standardized to a point that gives educational value (growth) to the learning of them. I have sometimes thought that we occasionally have taught routine processes in which the educational value is far to seek. We need to guard carefully against any work that might be classed as "busy work." I am also convinced that sometimes in our efforts to prove home economics a worthy member of the college curriculum we have attempted to make the work difficult by drawing on chemistry and physics and other sciences and have succeeded, not because it was in itself difficult but because as thus presented it was confusing to the mind of the student. Housekeeping involves many complex processes and it is not entirely certain that all of the reactions involved must be explained before we teach processes, nor is it in the interest of education to imply that we can at this time explain all because we can

explain some. We need better methods for making our applications more clear-cut and our conclusions more definite.

At this point it may be worth while to depart somewhat from our main subject and suggest that there are certain other objectives in home economics which perhaps concern teachers and leaders rather than students, but which may aid in attaining the major objectives already discussed.

The first is the seeking on the part of home economists of a more intimate knowledge of homes. We commonly know the homes of faculty members, of relatives and close friends, and often our first-hand knowledge stops at this point. If we are to be of largest service to homes we need a sympathetic interest in many types of homes, their problems, their needs, their elements of strength. There are difficulties here but a way can certainly be found, once we are convinced of the importance of the experience. Extension workers can be of help to teachers doing the more formal kind of teaching.

A second aim which might prove helpful is the study of the curriculum, carefully weighing educational values, avoiding repetitions, dropping out some courses if necessary, letting those remaining stand on their merit as being soundly educational for the future parents and homemakers. Perhaps our selection and classification of subject matter is not as logical as it could be made in the light of newer scientific discoveries and educational philosophy and methods, and needs particularly critical study just now.

The next suggestion must be in the nature of a question rather than a recommendation. Have we come far enough to be able to define the term "homemaker," set up a kind of standard for her guidance, formulate a code of ethics pehaps? There must be wide variations in individual cases and this is of course desirable, but have we not something a bit more definite to say to the homemaker of the future? At what points do we expect her to resist the flood of custom and prejudice, and do we stand ready to defend her in a rôle changed somewhat from the old rôle of homemaker? Is there any method by which she can judge her success other than that of waiting for what is so often stated as the final test, "a family raised to be useful members of society"? Would careful and prolonged thinking at this point be of any value?

And may I finally suggest as a double major objective that we seek to develop and encourage more home economics philosophers? In no other field, perhaps, would philosophy be so valuable if we interpret it as does Durant in "The Story of Philosophy:"

Science seems always to advance, while philosophy seems always to lose ground. Yet this is only because philosophy accepts the hard and hazardous task of dealing with problems not yet open to the methods of science—so soon as a field of inquiry yields knowledge susceptible of exact formulation it is called science. Every science begins as philosophy and ends as art; it arises in hypothesis and flows into achievement. Philosophy is a hypothetical interpretation of the unknown, or of the inexactly known; it is the front trench in the siege of truth. Science is the captured territory; and behind it are those secure regions in which knowledge and art build our imperfect and marvellous world. Philosophy seems to stand still, perplexed; but only because she leaves the fruits of victory to her daughters the sciences, and herself passes on, divinely discontent, to the uncertain and unexplored.

Home economics stands in need of philosophers.

THE PROTEIN VALUES OF FOODS IN NUTRITION

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The proteins of foods constitute a definite class of chemical compounds, readily identifiable by chemical means, though less readily determinable quantitatively. Much investigation has been undertaken in separating the different proteins in foods, in determining their solubilities and other properties, and in studying the kinds and relative amounts of the different amino acids of which they are composed. Such investigation is but one phase of the general problem of the chemical characterization of foods. It has a very direct bearing upon the nutritive value of foods, since it is concerned with the content of food nutrients. It may be that the information relative to the amino-acid content of the food proteins will indicate rather clearly whether they will prove to be deficient in nutrition; more often than not, however, it does not furnish a safe guide in such a judgment. In any case the amount of proteins in foods is a factor of importance in its nutritive value.

However, it is obvious that the nutritive value of a food depends not only upon its nutrient content, but also upon the extent to which the animal organism can use the contained nutrients. A fact of great significance in nutrition is that an animal must always ingest more nutrient material of all varieties than it actually subverts to its own uses, simply because nutrient material is inevitably wasted in digestion and in metabolism in the course of its utilization. Therefore, the complete evaluation

of a food as a source of nutrients to the animal necessarily involves biological as well as chemical investigation.

The results of the chemical investigation of the protein content of foods cannot at the present time be used in their biological evaluation, since in such evaluation only the nitrogen contained in foods can be traced in the excretions from the animal body representing the wastage of protein in digestion and metabolism. Although nitrogen is the most characteristic element in proteins, other food constituents contain nitrogen also. In the investigation of protein digestibility, the protein fed can be determined as well as the nitrogen excreted in the feces; but if the diet contain considerable amounts of other nitrogenous compounds than protein, the fecal nitrogen, even when corrected for contributions from the body, cannot be considered as representing only undigested protein. Furthermore, in investigations of the utilization of absorbed protein in metabolism, the nitrogen of the urine, even when corrected for body contributions, cannot be referred to the digestible true protein, since this cannot be accurately determined and since other nitrogenous compounds than protein may be absorbed from the gastrointestinal tract.

Hence, because of present experimental limitations in the study of protein wastage in digestion and metabolism, it becomes necessary to speak throughout in terms of nitrogen. In the complete biological evaluation of a food as a source of protein, therefore, it becomes necessary to take as the starting point not its content of protein but its content of nitrogen. The whole problem, therefore, resolves itself into a study of the utilization of nitrogen in nutrition, and should be frankly recognized as such. It may still be expedient to talk of it in terms of protein, both as a concession to current ideas, and as a recognition of the fact that, in practical nutrition, most of the nitrogen is ingested as protein and is utilized in anabolism mainly in the synthesis of tissue proteins. The prevalent custom of converting nitrogen values into protein values by the use of the factor 6.25, therefore, should be considered, not as a chemical makeshift, but merely as a conventional method of expressing such values.

While it is thus necessary to measure protein utilization and protein values of foods in terms of nitrogen, or of a purely conventional "protein," these measurements can be defended from the standpoint of logic as well as of expediency. The non-protein nitrogenous constituents of foods consist to a considerable, if not to a predominant extent, of amino acids and their derivatives. Obviously these amino acids are of equal value in tissue syntheses to the amino acids bound up in the protein molecule

itself. They may thus enhance the value of the protein by supplementing its amino acid deficiencies. They may, therefore, possess a true "protein value" in cellular growth and repair, and should contribute to the measured protein value of the food in which they occur, although they are not proteins.

The nitrogenous compounds of foods serve two purposes in human nutrition. They may serve (a) as sources of energy, in common with all other organic food nutrients, or (b) as the pabulum upon which the tissues depend in maintaining their nitrogenous integrity, in increasing their own nitrogenous substance during growth, or in the elaboration of nitrogenous constituents of milk and the production of the nitrogenous tissue constituents of offspring in the female. The latter function is the unique function of nitrogenous nutrients, and the "protein values" of foods relate to this function only.

While several methods have been proposed for measuring the protein value of foods in nutrition, and have been used with a considerable measure of success, it appears that the most direct method, and the one yielding results of absolute rather than relative significance, is that concerned with a study of the nitrogen metabolism. Such a method has been developed at the Nutrition Laboratory of the University of Illinois.

A description of the method, a defense of the assumptions upon which it is based, and a critical enquiry into the significance of its results need not be given here, since they may be found elsewhere in the literature (1). It seems sufficient to note that the experimental subjects are growing rats, and that the results relate, therefore, to the protein value of foods for maintenance and growth. The protein value of a food is taken to depend upon three determinations, i.e., (a) the nitrogen content of the food, (b) the coefficient of digestibility, or that percentage of the total nitrogen which is absorbed, and (c) the biological value, or that percentage of the absorbed nitrogen which can be used for maintenance and growth. The experimental conditions are so controlled that the biological values obtained will be maximal.

In our early experience with the method, it became evident (2) that the biological values obtained were closely correlated with the percentage of nitrogen in the experimental diet, in such a way that the lower the level of nitrogen feeding the greater the biological value obtained. We believe that this effect is due to the relative protein-sparing effect of the non-nitrogenous constituents of such diets. In making comparisons of the protein values of foods it is necessary to obtain results at approximately

the same level of feeding. The level chosen has been 8 to 10 per cent of protein (N × 6.25).

A summary of the results thus far obtained upon human foods is given in the table on page 126.

To illustrate the method and to understand its significance, it is necessary to follow in detail the calculation for one food:

Taking beef round as an example, according to average analysis lean beef round contains 21.3 per cent of protein on the fresh basis and 71.0 per cent on the dry basis. The digestibility of this protein, making allowance for the metabolic nitrogen of the feces, is 96 per cent according to a number of experiments on rats. Hence, on the fresh basis, beef round contains 20.4 per cent of digestible protein, and on the dry basis, 68.2 per cent. However, all of the absorbed protein is not available in anabolism, mainly because of some disproportion among the constituent amino acids as compared with the body's requirements. In rat experiments we have found an average of 69 per cent of the absorbed protein available for the requirements of maintenance and growth at a level of 8 to 10 per cent of protein in the diet. This 69 per cent is the "biological value" of beef round protein, a term introduced and defined by Thomas. Hence, the "net" protein in beef round is $20.4 \times 0.69 = 14.1$ per cent on the fresh basis, and $68.2 \times 0.69 = 47.1$ per cent on the dry basis.

But this cannot be considered the final protein value of the food, since in the digestion of food, protein (nitrogen) is inevitably lost from the body in the feces. This is the so-called "metabolic nitrogen" of the feces. As established elsewhere (3), it appears to be a wastage of nitogen associated with digestion rather than with metabolism. It should, therefore, be charged against the food, and in particular against the protein of the food. It may be questioned why it was not charged against the food in computing the absorbed protein, by using the coefficient of *apparent* digestibility rather than the coefficient of *actual* digestibility. The answer is that the biological value applies to the actual absorbed protein, not to the more or less fictitious figure obtained by the use of the ordinary coefficient of digestibility uncorrected for the metabolic nitrogen in the feces. Hence, some other method of properly allowing for this wastage of nitrogen must be applied.

From a study of a large number of experiments in which different species of animals were fed nitrogen-free diets, the rather surprising fact was discovered (3) that the metabolic nitrogen in the feces bears a rather constant relation to the dry matter consumed, except in cases where the food contained considerable amounts of crude fiber. This relation was found to be approximately 0.2 gm. of metabolic nitrogen per 100 gm. of dry matter. Averaging a considerable number of reported experiments on human subjects gave a value of 0.23 gm. Hence, in the calculations in the table, this value, equiva-

lent to 1.4 gm. of protein per 100 gms. of dry matter, or 1.4 per cent, is assumed. On the fresh basis, for beef round, this value becomes $1.4 \times 0.30 = 0.4$ per cent. The final protein values of beef round are obtained by deducting these percentages from the percentages of "net protein," giving $14.1 - 0.4 = 13.7$ per cent on the fresh basis, and $47.1 - 1.4 = 45.7$ per cent on the dry basis. These values presumably give the maximum percentage of protein (nitrogen) in the food which is actually available for the maintenance and growth of the nitrogenous constituents of the tissues.

Protein values of foods for maintenance and growth: Level of protein feeding, 8 to 10 per cent

FOOD	WATER CONTENT‡	PROTEIN CONTENT‡		QUALITY OF PROTEIN		METABOLIC PROTEIN IN FECES§		PROTEIN VALUE OF FOOD	
		On fresh basis	On dry basis	Digestibility (corrected)	Biological value	On fresh food basis	On dry food basis	On fresh basis	On dry basis
	per cent	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*
Whole egg*	73.2	13.2	49.3	100	94	0.4	1.4	12.0	44.9
Milk	87.0	3.3	25.4	100	85	0.2	1.4	2.6	20.2
Egg white*	86.2	12.3	89.1	100	83	0.2	1.4	10.0	72.6
Beef liver	71.2	20.4	70.8	90	77	0.4	1.4	14.9	51.1
Beef kidney	76.7	16.6	71.3	99	77	0.3	1.4	12.3	52.8
Beef heart	62.6	16.0	42.8	100	74	0.5	1.4	11.3	30.3
Beef round	70.0	21.3	71.0	96	69	0.4	1.4	13.7	45.7
Pork, ham	60.0	25.0	62.5	100	74	0.6	1.4	17.9	44.8
Veal†	73.4	20.7	78.0	100	62	0.4	1.4	12.4	47.0
Rolled oats	7.7	16.7	18.1	90	65	1.3	1.4	9.8	10.6
Whole wheat	11.4	13.8	15.6	91	67	1.3	1.4	7.1	8.1
White flour	12.8	10.8	12.4	100	52	1.3	1.4	4.3	5.0
Whole corn	10.3	7.5	8.4	95	60	1.3	1.4	3.0	3.5
Potato	78.3	2.2	10.1	78	67	0.3	1.4	0.8	3.9
Navy beans*	12.6	22.5	25.7	76	38	1.3	1.4	4.2	6.0
Cocoa	4.6	21.6	22.6	38	37	1.4	1.4	1.6	1.8
Chocolate	5.9	12.9	13.7	38	37	1.4	1.4	0.4	0.6

* Cooked.

† The cut tested was not recorded. It proved to be very fibrous. Analysis for shoulder cut assumed.

‡ Average analyses taken, as far as possible, from Bul. 28 (revised), Office of Experiment Stations, U. S. Dept. Agr.

§ The metabolic nitrogen in the feces is assumed to equal 0.23 g. per 100 gm. of dry matter of food. See *Bull. Natl. Research Council*, 11, pt. 1, no. 55, p. 23.

The calculations in the table represent a new method of evaluating foods with respect to the nutritive value of their protein (nitrogen), a method that takes cognizance of both the quality and the quantity of the protein (nitrogen) in foods.

The protein values summarized in the last two columns of the table afford a precise statement of the known superiority of animal foods over

vegetable foods as sources of protein in the diet. Even such vegetable foods as dried (navy) beans and cocoa, which are relatively rich in crude protein, are unimportant as sources of protein in nutrition, because of the enormous losses of nitrogen in the course of their utilization in digestion, or in metabolism, or in both. Their high content of protein is deceptive, and the conclusion that such foods are "meat substitutes," though frequently stated, must be considered erroneous. Of particular significance are the data relating to white flour, since this food enters so largely into the diet of all classes of the American people. With an initial content of 10.8 per cent of protein, its final protein value becomes 4.3 per cent on the flour as purchased, mainly because of a loss of 48 per cent in metabolism. The marked superiority of whole wheat over white flour and the distinct superiority of whole oats over whole wheat as sources of protein are worthy of note. The proteins of degerminated corn meal would probably possess a distinctly lower biological value than the proteins of whole corn.

Among the animal foods it is evident that meats and meat products are pre-eminent as sources of protein. Although the biological values of animal tissue proteins (nitrogen) are appreciably lower than those of eggs or of milk, the higher content of protein in animal tissues, either on the fresh or the dry basis, offsets or more than offsets their greater losses in metabolism.

The nitrogenous compounds in different cuts of the same kind of meat may differ greatly in chemical characteristics, indicating in particular a different proportion of connective tissue. In all probability the varying content of connective tissue in different cuts of meat modifies the biological value of their nitrogen in such a way that the greater the proportion of the connective tissue the smaller is the biological value. The low value for veal reported in the table is undoubtedly associated with the high connective tissue content of the sample tested, while the higher value found for ham than for beef round would seem to be explained by the distinctly and constantly lower percentage of connective tissue in pork than in beef round in unpublished experiments from this laboratory. The relatively high biological values for liver, kidney and heart may also be associated with a relatively low content of connective tissue. From such considerations it may be seriously questioned whether the cheaper cuts of meat, known to contain relatively much connective tissue, are as high in nutritive value with reference to protein as are the higher priced cuts.

It is a singular fact that in the preparation of animal carcasses for

human consumption, as in the preparation of the cereal grains, the portions of the product in least demand have been found to possess the greatest dietetic value with reference to certain nutrients. The superiority of many of the visceral organs of animals over the muscle meats as sources of vitamins is analogous to the superiority of the germ and outer layers of the cereal grains over the endosperm, of which the cereal flours consist. With seeds this superiority of the "offal" extends to the character of the proteins and to the mineral content. That the proteins of liver, heart and kidney are somewhat superior in quality to the proteins of carcass meat is indicated by the biological values reported in the table. In the same connection it may be mentioned that Forbes and Swift (5) have recently reported that the iron content of these organs is much higher than that of muscle meats, while Robscheit-Robbins and Whipple's (6) experiments have indicated the marked superiority of liver over all other foods, including meats, in the promotion of blood regeneration after hemorrhage. Evidently the food value of the edible animal viscera is high and unique in several respects, and their consumption should be encouraged by dietitians and physicians.

The biological values reported in the table may be considerably altered by an alteration in the level of protein feeding. A diet containing 8 to 10 per cent of protein is considered a low-protein diet in human nutrition; according to Sherman (4) a maintenance diet for a man at moderate activity should contain 6 per cent of its available calories in the form of protein. As the level of protein decreases from 10 to 5 per cent, which is near the maintenance level for the rat also, the utilization of proteins in metabolism will in general increase. For example, the biological value of milk proteins will increase from 85 to 93, that of corn proteins from 60 to 72, that of oat proteins from 65 to 79; on the other hand, the biological value of potato proteins (nitrogen) remains the same under these conditions. At the 5 per cent level, casein has been found to have a biological value of 71, rice proteins a value of 86, and yeast proteins a value of 85. If the level of protein is increased, a decrease in biological value occurs. For example, in one experiment the value for beef liver was found to be 82 at an 8 per cent level and only 58 at a 16 per cent level. It appears that, with respect to protein as well as with respect to energy, the animal body economizes at low levels of intake and becomes increasingly extravagant at higher levels. One practical conclusion from this situation is that, in adult nutrition, where the protein requirement is low, the quality of the protein fed, even in low-protein diets, is not a matter of concern. This is the conclusion to which Sherman has come from a study

of a large number of experiments concerned with the determination of the minimum protein requirement of men, while Rose and MacLeod (7) have reported essentially the same results.

The proper evaluation of a food as a source of protein in the human dietary is, in itself, a problem possessing many complications to the experimentalist; the evaluation of mixtures of foods on the same basis involves still another complication. One important factor limiting the utilization of proteins in metabolism, is their amino acid make-up. We may say that for each protein the utilization in anabolic syntheses is limited by a deficiency of some one of the indispensable amino acids. If this amino acid is contained in excess in another protein, it is evident that if the two proteins are mixed in the diet, the latter will enhance the nutritive value of the former protein; in other words, it will "supplement" it. However, it should be realized that the supplementary relation among proteins is a mutual one, since the protein furnishing its excess of a given indispensable amino acid to another protein with which it is mixed, must receive from this protein an excess of another amino acid in which it is itself deficient.

If the biological value of a protein is 70, then 30 per cent of its digestible fraction represents a mixture of amino acids of which it can only be said that it does not contain the amino acid limiting the utilization of the protein. *It is this 30 per cent that is concerned in all supplementary relations with other proteins.* It will, therefore, be referred to as "the supplementing fraction" of the protein. It must furnish all of the amino acids that are available for enhancing the nutritive value of other proteins, and it represents that part of the protein whose value in nutrition can itself be enhanced by the addition of amino acids from other sources.

From such considerations as these it may be inferred:

1. That proteins having the same amino acid deficiency will not exhibit supplementary relations, because the supplementing fraction of protein in each case will contain none of this particular indispensable amino acid. For example, milk and navy bean proteins would not be expected to possess supplementary relations, because the limiting amino acid in each is cystine.

2. Conversely, proteins having different amino acid deficiencies will *always* exhibit some supplementary relation. The extent of the supplementing effect will depend upon the amino acid composition of the two supplementing fractions after their primary amino acid deficiencies have been mutually satisfied. It may be considered that the interaction

between the two supplementing fractions will proceed until a common amino acid deficiency is reached in both.

3. Other things being equal, the greater the supplementing fraction of a protein mixture, the more general and the more marked will be its supplementary relations with other protein mixtures. A protein mixture, such as that occurring in eggs, possessing a high biological value of 95 and a low supplementing fraction of 5, would not be expected to exhibit as marked or general supplementary relations as that of beef, for example, with a biological value of 69 and a supplementing fraction equivalent to 31 per cent of its absorbed nitrogen. Some connection between the biological values of animal proteins and the supplementary relations with the proteins of white flour have been reported by Mitchell and Carman (8). The marked supplementary relations between meat proteins and cereal proteins established in this and other similar investigations are to be explained not only by the different character of meat and cereal proteins, indicating different types of amino-acid deficiencies, but also by the fact that the supplementing fraction in each case is large, i.e., 25 to 50 per cent of the absorbed protein.[1]

Mixtures of white flour proteins and beef proteins or white flour proteins and veal proteins in the ratio of 2 to 1 were found to possess biological values slightly higher than the meat proteins themselves. This situation never existed when white flour was mixed in similar proportions with whole egg, egg white or milk. Although the proteins of whole egg and milk showed distinct supplementary relations with white flour proteins, no such relations could be definitely established between white flour proteins and egg white. A mixture of milk and cocoa proteins has also been found to exhibit no supplementary relations. We have been unable to confirm the conclusion of McCollum, Simmonds, and Pitz (9) that the addition of gelatin to oat proteins enhances their nutritive value. However, milk and corn proteins exhibit a marked supplementary relation (10).

Little quantitative information has been obtained concerning the actual supplementary relations among food proteins, particularly relations of significance in human nutrition. Several experiments professing to supply such data have not been planned in such a way as to yield readily to interpretation. It is clear that this important phase of the problem of

[1] These considerations take no account of the fact that part of the "supplementing fraction" represents amino acids that have been drawn into the energetic reactions of the body because of a lack of sufficient non-nitrogenous protein-sparing material in the diet. This factor is of unknown value and would not alter the essential features of the argment given.

protein utilization in animal metabolism is closely related to such problems as the determination of the indispensable amino acids among those found in the protein molecule, and the determination of the primary, secondary, and subsequent amino-acid deficiencies in the protein mixtures of foods. With information supplied by experiments concerned with these problems, it should be possible to investigate the supplementary relations among food proteins by a more intelligent and effective method than that involving promiscuous combinations of foods.

REFERENCES

1. Mitchell, H. H. A method of determining the biological value of protein. *J. Biol. Chem.*, **58**, 873 (1924).
2. Mitchell, H. H. The biological value of proteins at different levels of intake. *J. Biol. Chem.*, **58**, 905 (1924).
3. Mitchell, H. H. The determination of the protein requirements of animals and of the protein values of farm feeds and rations. *Bull. Natl. Research Council*, **11**, Part 1, No. 55, 21–32 (1926).
4. Sherman, H. C. Protein requirement of maintenance in man and the nutritive efficiency of bread protein. *J. Biol. Chem.*, **41**, 97 (1920).
5. Forbes, E. B., and Swift, R. W. The iron content of meats. *J. Biol. Chem.*, **67**, 517 (1926).
6. Robscheit-Robbins, F. S., and Whipple, G. H. Blood regeneration in severe anemia. II. Favorable influence of liver, heart, and skeletal muscle in the diet. *Am. J. Physiol.*, **72**, 408 (1925).
7. Rose, M. S., and MacLeod, G. Maintenance values for the proteins of milk, meat, bread and milk, and soy bean curd. *J. Biol. Chem.*, **66**, 847 (1925).
8. Mitchell, H. H., and Carman, G. G. The biological value of the nitrogen of mixtures of patent white flour and animal foods. *J. Biol. Chem.*, **68**, 183 (1926).
9. McCollum, E. V., Simmonds, N., and Pitz, W. The nature of the dietary deficiencies of the oat kernel. *J. Biol. Chem.*, **29**, 341 (1917).
10. Mitchell, H. H. The supplementary relations among proteins. *J. Biol. Chem.*, **58**, 923 (1924).

TEACHING FOOD MANAGEMENT TO PROSPECTIVE HOMEMAKERS

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As a homemaker looking back upon my home economics teaching experience it is interesting to see what I would now do differently and what I would emphasize further in the light of actual homemaking experience. Every teacher has had the experience of having some homemaker come forth with the criticism that what we teach is not practical. In some instances we may have know that the criticism was not justified; in others we could not be sure because as teachers we were apt to be rather far removed from actual homemaking problems. As I watch my own homemaking interests and those of the homemakers with whom I have much contact and think of them in terms of what I would teach now, there are certain impressions which register vividly in my mind.

The first of these impressions is that four years of homemaking have served to convince me that teachers of home economics are doing excellent work in the teaching of food in that they are placing emphasis on principles and proportions in cooking. We, as homemakers, must have this sort of training to enable us to handle our work quickly and easily or to be able to delegate it intelligently. The teaching is in the right direction, too, in that it is emphasizing the home problems which will help the student to apply her knowledge of food preparation to the right nutrition of the family and to the problems of wise buying. Although, as I have indicated, I sincerely believe that the general tendency of the present home economics teaching of food work is right, there are, however, certain places in which it appears that the emphasis should be shifted and others in which it should be stressed in order to meet the needs of actual homemaking.

A problem which deserves more attention is that of meal planning to meet certain general conditions found in the average home. In most teaching of meal preparation good experience and practice is given in planning and preparing appetizing meals for different costs, different food values, and different seasons. There are two problems, however, related to management which immediately confront the homemaker who carries on her work without outside assistance. One is the planning of meals for guests, especially where there are small children present in the household. This does not mean the planning of the traditional three or

four course dinner or luncheon but meals which fit the time and energy at the command of the homemaker. Were I to teach meal planning and preparation now I should have my students meet some of the definite needs of homemakers by planning meals for guests with two objects in view: First, to select combinations which would require but a minimum amount of time just preceding the dinner hour; and second, to make these meals a little simpler if possible than the usual dinner from the standpoint of the work involved. This means placing emphasis on having each thing served as good as possible and relying on generous amounts of each rather than on great variety. Bound up in this is another form of classifying food preparation facts. Why is it not important for the girl to have desserts, salads, vegetables, and other dishes listed according to the total time required for preparing them and according to the amount of time needed just before they are served, as well as to classify them according to cost and composition? This is what the homemaker must actually do in her mind when she is planning meals for a day which will present extra demands, as is the case with expected company, or indeed often for her family alone. On many occasions, the cost in money to the homemaker is not nearly so important as the cost in time. The management of time in relation to food is one of the large responsibilities particularly at times of unusual pressure. For her to realize that when there is to be extra work it is the time to simplify rather than to elaborate, means a gain in appreciation of a management factor in homemaking. She should, however, be given in addition to this appreciation the actual food information which will make it possible for her to handle such management problems.

Another aspect of meal planning which as a homemaker I believe needs attention in food classes is the planning and preparation of those dishes and meals which can be used with satisfaction both for adults and children. It sometimes happens that a whole family is sufficiently fond of such a dessert as plain custard to make exactly the same dessert serve for young and old alike, but on the other hand there are some desserts which need to be served in much simpler form to the younger members of the household. The information needed to meet this problem would be of two kinds. First, the wise selection and preparation of foods which can be used by both adults and children. An example of this might be spinach served on toast with a poached egg dropped on top. This would do for a dinner dish for a child at the same time that it supplied a luncheon dish for the grown-ups. The second type of information bearing on this prob-

lem would concern planning dishes which with a very slight variation might be used for both children and adults. Perhaps the simplest illustration of this would be junket as dessert for the very young child, and junket with fresh fruit, such as peaches or berries, on it for the parents and older children. The alert homemaker will gradually evolve many of these, but just as it has been deemed worth while to avoid the hit-or-miss learning which is so expensive of time by teaching the principles of cookery and good proportions beforehand, so it would seem that we should teach some of these time savers.

Another food problem which confronts the homemaker and which, in her estimation, needs more attention by the teacher of home economics, is that of planning meals with the thought of more than one meal ahead. Planning so that approximately a dinner and a half is prepared at a time, or so that two desserts in one are worked out, will save the homemaker much needed time. This means working out some definite meals as a basis and also that too great a demand for variety must be avoided.

Another project for the teacher of foods to work on if she is to meet the needs of the home is the cost problem. I recognize that this is difficult to handle because of the varying economic standards of students and because of the lack of facilities for making the study of costs concrete and vivid. More could be done, however, in making clear certain facts related to cost. Among those needed two seem outstanding. The first is a knowledge of the approximate minimum per capita cost of adequate food and of what food materials are involved in such a minimum diet. From this the student can gain the further understanding that if the standard of living demands lettuce instead of cabbage for a green vegetable, an occasional tender cut of meat instead of the universal stewing portions used in minimum cost diets, fresh fruit instead of dried, orange juice instead of tomato juice for the babies and children, then the amount spent per day must come up or inadequate amounts of food be served. This information and understanding of a minimum food cost, I believe, is important, for among some home economics trained persons who are rightfully interested in developing their thrift budget there is a strong tendency to lose sight of what it must cost to maintain the standard of living which they advocate, including the provision of adequate food. They continue in this ignorance until physical conditions in members of their families force them to realize that though the food served has been well prepared it has not been sufficient in quantity or right in kind.

There are other food cost problems which deserve more attention than is usually accorded them, in all probability because of the rather scant

knowledge which the home economics teacher accumulates unless she has had considerable experience. I refer to those problems related to economical purchase of food. It sometimes takes a homemaker many months to discover facts about purchasing food economically that she might well have at her command at the beginning of this experience. To illustrate, the student should be taught how to determine whether it is more economical to purchase a large or small can of fat or salad oil, what saving is involved in the use of larger cans of vegetables and fruits as opposed to small ones, and how the purchase of larger cans affects the meal planning. The difference in original cost is not the only point to be considered. Is there less waste? Is there a tendency to use more of expensive food materials if large quantities are easily available? These and other determining points should be before the minds of the students as means of solving the more perplexing purchasing problems. Many cost questions are still receiving scant attention, though they represent important information to the average homemaker who has everlastingly before her the problem of providing her family with satisfying food at the lowest possible cost.

If the home economics teachers will continue their good work in the teaching of principles and proportion, their increasingly good presentation of the meal planning problem from the angles of nutrition and satisfaction of taste, and will add to this background more meal planning with certain time and energy factors as a basis; if they can make students more conversant with the costs of different standards of meals; and if they can do more to acquaint the student with the means of keeping down the cost of food, homemakers will be jealous of the information which the present-day student receives, so vital will it be to good home management.

THE MANUFACTURE OF FUR GARMENTS

DAVID C. MILLS

General Director, National Association of the Fur Industry

Is there such a thing as a fur coat actually worth fifty or seventy-five thousand dollars? Of course there are coats actually worth that much. And why not as much for perfection in clothing as for perfection in horse-flesh or jewelry? When all is said, furs finish the attire of women as nothing else can, and although such a garment will be no warmer than any other fur coat, or wear any longer, the sheer satisfaction of owning something different from and better in quality and workmanship than anything else of the kind in the world is worth whatever one can afford to pay, especially as it completes to the last detail the costume of the fortunate wearer.

In the creation of such a garment the actual material is far more costly than that used in cheaper garments. Each skin is as nearly perfect as such a thing can be, and that means that each is selected from hundreds or thousands of its kind. This selection is not left to subordinates. The head of the house will attend to this himself and in so doing may make several trips abroad and fairly comb the foreign, as well as the domestic markets for suitable skins. After several hundred skins have been selected and bought, regardless of cost—for individually they are indeed "gems"—those actually entering into the garment must be selected from this selection; and the remainder may be held for some time before another customer comes along with a deep, full purse.

The house may employ a designer at a salary of ten or twenty thousand a year and many days of this man's time enter into the cost, for the shape of the garment and the arrangement of the skins in relation to one another have much to do with bringing out the full beauty of the material. The "boss" and the designer spend hours working over this problem. Sketches and even finished wash-drawings are made and considered.

After the pattern is drawn on paper, it is made up in canvas and fitted on a living model before a single skin is cut. When the canvas model is satisfactory the work usually proceeds, although sometimes a model is made in some similar though cheaper fur before the fine skins are touched.

The cutter, a highly-paid artizan, is given the pattern and the selected skins which have been matched as closely as possible. He sees the canvas model, the sketch or wash-drawing, he consults with the "boss"

and the designer, and he sets to work. He first selects the skins most nearly alike in color, texture, and size, in number sufficient for the garment, laying aside the rest for emergency. Then he selects the skins which in his judgment are best suited for each of the various parts of the garment.

All this requires an exceptionally good eye for color and knowledge of the material itself, and, moreover, matching fur has a technique all its own. For example, if one is matching sables one stands on a low platform and looks directly down into the fur to get the effect of the under-fur through the surface coloration, while in matching certain flat furs, one looks at them from an angle approaching the horizontal. Different problems enter into the matching of different furs. For example, Russian sable has short, flat hair on the head, gradually becoming longer and deeper until the rump is reached. The sides (which formed the under part of the living animal) are thinner and shorter-furred and lighter in shade than the back. Damages to the skin, shot holes or the scars of battle, must be repaired in such a way that they will not show and there is an especial technique for even this. As no two skins are alike those more nearly alike must be placed together.

When the matching is at least tentatively completed the cutting begins and to the uninitiated this cutting is fairly scandalous. The cutter examines the fur side of the skin carefully and makes a few tiny incisions through to the underside. Then he turns it over and deliberately slashes the skin this way and that until it is truly a wreck of its former self. Sometimes he first marks the skin, but often he cuts with a free hand. And all the time he is slashing, a slip of his cutter's knife may reduce the value of a five hundred dollar sable skin to about five hundred cents.

He cuts away the short-haired parts, shaping the skin somewhat in so doing. He pulls and stretches the skin while he works, with the purpose of increasing the surface area where the fur is naturally heavier and decreasing the area where the fur is thinner, thereby giving the whole skin an even distribution of fur. Another purpose is to make the skin as large as possible without making the fur appear thin.

The cutting of the skin in slashes is partly to make it longer and narrower, but also to maintain and indeed emphasize its color scheme.

Perhaps I can explain this in principle. Suppose that we have a mink skin with a dark brown stripe down the center of the back and the fur shading off to light brown at the sides or belly. First we trim off the head and sides. Then we cut the skin into strips quarter of an inch

wide, leaving the center and outer strip half an inch wide. Next, we take the strip at the right of the dark center strip and the strip at the left, sew them together along their length and then sew them at one end to the center strip. We repeat this process with the next two strips on opposite sides, and the next, and so on until all the strips are used. Finally, we have a strip half an inch wide and several feet long shading gradually from dark brown at one end to lighter brown at the other end. This part of the cutter's task is known as "letting out." I have exaggerated its simplicity, for we do not seek half-inch wide strips of fur in making a coat. You will no doubt recognize the process if you have a mink coat with its stripes running from the collar to the bottom of the skirt and if you rip open the lining you will see that the seams are very near together.

The cutting also serves to curve the coloration or the direction of the fur, as around corners. Pieces may be cut out of one side of a skin and added to the other side to curve it appropriately, but "letting out" and stretching accomplish most of this.

Where individual skins should be emphasized to show their beauty, as in fine squirrel coats, the edges of the skins are cut square and no effort is made to conceal the seam, but in cases where the entire garment is to appear as a single skin, as in a seal-dyed muskrat coat, the seams are concealed by cutting the edges zigzag, or in some other irregular manner, before sewing them together.

While the cutter is cutting, say a sleeve, conforming to the pattern, an operator is sewing his work together as fast as it is cut. Fur seams are sewed by placing the two parts fur-side together, their edges exactly even, over-stitching, and then flattening them out. Sewing is done by hand, at times, but the overstitch machine in the hands of a good operator is as good, if not better, and far more rapid. There is, however, a great deal of hand sewing on the very expensive coats and much on even the cheapest.

The operator is also a high-priced man (a good cutter will get over a hundred dollars a week and a good operator over eighty) and he is fully as capable of making or marring the garment as the cutter.

Due, I believe, to the fact that fur work is a handicraft and that the worker sees it grow under his hand, pride in craftsmanship is very pronounced among the fur workers. It is as evident among the "coney choppers," as the cutters of rabbit-skin coats are called, as it is among the "natural" cutters who handle the finest sables and chinchillas, although each regards the other with something bordering on contempt.

"Sables? Huh! I could cut the finest sable coat in the world if I could take all summer to do it like these fellers;" or "Seven coats a week? Huh! I could cut a dozen a week if I didn't have to look at what I was cuttin', like these, now, coney choppers."

The truth is that all are very highly efficient craftsman, artizans of sorts, or they could not produce such beautiful results with such difficult material, and this efficiency runs through the entire group of crafts that go into the making of the garment.

While the designer, the cutter, and the operator all share in the achievement of style in furs, there is one craftsman, the nailer, who, in my judgment is also entitled to considerable credit, although he is usually regarded as of little account by his more highly-paid fellow craftsmen. He, too, can make or mar a garment. The best cutter and the best operator would be botchers if their work were improperly nailed.

When the skins for, say, a sleeve, have been cut and sewed together according to the pattern, the sleeve is given to the nailer. This man's equipment consists of a "board" placed on a table or on pair of a "horses" like those used by paper hangers, a hammer, a pair of pliers, some special nails or pins, and a piece of chalk. The nails used for delicate skins are fine pins, driven through the skin with care, while in the case of heavier skins, the nails are larger and are driven in with remarkable rapidity.

With the chalk he draws an outline of the sleeve pattern on the board which he has carefully cleaned. Then he dampens the skin or leather side of the sleeve, thoroughly, but evenly, and with no excess water, if the skins are of a delicate nature. The wetting must be enough to render the skin workable, but not enough to wet the fur.

He spreads the sleeve, fur-side down, and nails it to the board, stretching it to conform to the pattern. No, not quite so simple as that. There are complications.

For example, the stretching must be uniform, for if the skin were stretched more at one place than elsewhere, the fur would be thinner at that point in the finished article. Of course, this would do no harm under the arm or under the revers or collar, but it would take away from the beauty and value of the garment to have the visible parts dotted with thin spots here and there. Too much stretching will even change the color by thinning out the hair, reducing the number of fur fibers per square inch, and thereby letting in more light. Carelessness results in tears that are sometimes costly and often difficult to repair. Minute holes in the skin that may not have been noticed are enlarged by the stretching and must be repaired.

Moreover, the material must be so stretched that the seams, the stripes, and the direction of the fur are kept in line as intended, otherwise the garment would be very different from the designer's concept, and the nailer would find himself looking for another job. If the seams are to be emphasized as in a fine squirrel coat, they must be nailed regularly, as they were cut and sewed. On a fine coat such as the expensive one we have mentioned, the cutter and the nailer are in almost continuous consultation.

Some years ago, the New York fur trade gave itself a party, a fashion show for furriers only. The public was not invited, but for three nights we managed to pack the old Madison Square Garden with furriers. Among other things, we showed a model workshop and in it a very fine mink opera wrap nailed on the board. There were over thirteen thousand nails in that garment, which was a masterpiece of the nailer's craft, but not by any means unique.

When the material has been properly nailed, the board is placed against a wall and the skins allowed to dry by evaporation at normal temperatures; that is, to dry slowly and evenly.

When the various parts have all been dried on the board and have been gone over by the cutter, who evens up the edges, they must be sewed together by one of the operators. To facilitate this, they are taped; that is, tape is sewed to the edge of the part, reinforcing it, and the several parts are then sewed together.

Wherever in the garment exceptional stress may come in service, it is customary to sew on tape or canvas to take up that stress. This is called "staying." On very delicate skins the seams are sometimes reinforced by cementing instead of sewing the tape on. Sometimes a fabric is cemented over the entire surface of certain very delicate skins to add to their strength. This practice was common some years ago in manufacturing rabbit-skin garments, but modern dressing methods produce stronger skins than formerly and the fabric backing is little used, or only where stress is severe.

Another means of taking the strain off the fur is by the use of appropriately placed interlining of buckram or other strong fabrics.

At last the garment is ready for the lining, which has been cut according to pattern. This hardly requires description. It is noteworthy, however, that in making fur coats, there is usually no sparing of expense in the lining. If one is making a coat of sables, worth four or five hundred dollars for a few square inches, one can well afford to throw in

a few hundred dollars worth of linings, and even in the cheapest coats the linings are usually of exceptional quality.

Now can you see why fur coats cost more than cloth coats. What I have said is probably enough to show much of the skill and patience required in making a coat of skins of which some are worth many times their weight in gold, yet I have omitted many details for the sake of intelligibility, omissions for which I shall be taken to task by my furrier friends if this happens to fall into their hands. I might have described ironing, glazing, drumming with sawdust, beating, and damaging. Indeed, damaging needs a word of explanation: it is repairing the damages which may come to a coat during the making even with careful handling, and the man who does it is known as a "damager."

All these processes are followed in the case of the cheap as well as the expensive coats. They are performed more rapidly and in quantity production continuous repetition results in lower cost, but even in the cheapest coats the individual garment receives the attention of every expert in the place in due course.

This requires personal supervision by one of the firm or by a highly paid supervisor or "inside man" with foremen under him at the head of each craft. That is the reason why the fur trade is made up of innumerable rather small factories. A shop employing more workers than may be thoroughly supervised by one competent inside man usually gets into trouble with its costs of production. Fifty to a hundred employees make a "big shop" and only a very few establishments have over two hundred workers because personal supervision can rarely be delegated successfully.

FAMILY RECOLLECTIONS OF ELLEN H. RICHARDS

LAURA E. RICHARDS

Gardiner, Maine

It is a great pleasure and privilege to be allowed to say a few words respecting the family aspect of the life of my honored sister-in-law. My acquaintance with her dates back to the time of her engagement and marriage, in 1875. I recall her at that time as a slender, erect figure, instinct with energy and purpose; a woman who seemed never to tire. The thing that impressed me perhaps most deeply was her devotion to her mother. Most women, we hope, are devoted to their mothers, but here was a woman whose every waking moment seemed to have a dozen things of importance calling upon it, yet there was always time for her (and I shall be forgiven for adding, for her husband, equally absorbed in his profession) to minister to every whim (and there were many whims) of the aged and delicate parent, who passed the remainder of her life with them. I do not believe that either of them ever spoke an impatient word or had an impatient thought in connection with old Mrs. Swallow.

The great sorrow of Mrs. Richards's life was her childlessness. She had a deep love for and understanding of children. Having none of her own, and no nieces and nephews of her own blood, her latent tenderness showed itself in unceasing kindness to the children of her husband's brothers. She made her "in-laws" feel that they were always welcome in the busy household at 32 Eliot Street. The door was always open, there was always a spare room and a warm welcome, this entirely irrespective of the ever-increasing demands of her professional work. Not only by the fireside but actually in the office itself, we were always welcomed. I think with remorseful amusement of a day when I went to see her at "Tech," anxious for information upon some matter of domestic chemistry. My knowledge of chemistry was a minus quantity, but I always felt that I had but to turn a page of the "Ellencyclopaedia" and all would be well. I found her in her own little office, the most curious spot, I think, that I have ever seen; a tiny corner, mostly filled with crucibles and retorts, beakers and blow-pipes, and many other objects with whose names I have not even a literary acquaintance. There was just room for herself and her stool, but somehow some attendant sprite managed to find room for a chair for me, and I sat down shamelessly to steal ten minutes from Science; to ask my foolish question and to have it answered as kindly and seriously as if it were a matter of national im-

portance. This is but one of many instances. I do not believe Sister Ellen ever refused help or counsel to anyone who came to her. I could write volumes on this one point of her responsiveness to appeal; but that would be going outside of the family.

One story I must tell of her later life, which has always seemed to me a very bright jewel in her crown. Her husband's elder brother, General John T. Richards, had been much out of health, and his daughter, Mrs. Henson, living in England, came over to pay him a visit. Of the other two daughters, one lived in New York, the other in Gardiner, Maine. Mrs. Richards at this time was an elderly woman, far from strong. She and "the Professor" insisted upon the whole family's coming to 32 Eliot Street, assured them that there was room for all, would not hear of their going anywhere else. Thus urged, the Richards family gladly consented, spent some happy days at 32 Eliot Street, and never knew that after bidding them goodnight cheerfully, their hostess went out to sleep at the College Club, in order to make room for them. I could tell nothing more characteristic than this story, which will never be forgotten by any member of her husband's family.

It was not only members of her own family who were thus taught to regard 32 Eliot Street as a second home. Augusta ——, a Swedish woman of remarkable character and abilities, was general servant for Professor and Mrs. Richards through many years, and was a most valued member of the family. Her mother, late in life, lost her home, in circumstances of painful domestic tragedy. Mrs. Richards bade Augusta bring the old lady to 32 Eliot Street; gave up her own room to her, moving up to the third story herself (as being stronger and better able to go up the stairs); kept her there in comfort and happiness as long as she lived.

Sister Ellen was not only hostess and entertainer, she was also visiting minister. The case I have in mind is that of Mr. Richard Sullivan, her husband's beloved uncle by marriage, who, a widower, blind and childless, lived for many years in Brimmer Street, alone save for two faithful servants. One evening in every week Mrs. Richards spent with Mr. Sullivan; nothing, so far as I know, was ever allowed to interfere with this; it was one of the things she did. A day of hard work behind her, a trip to Jamaica Plain before her—that was all in the day's work; Uncle Richard must never fail, and so far as I know, never did fail, of his evening. Another evening, Tuesday, was devoted to receiving her husband's family. We might always be sure of finding her at home, always sure of a cordial and delightful welcome from both. Her brother-in-law, Mr.

George H. Richards, a bachelor, found, I fancy, through many years, Tuesday evening the best of the week.

Mrs. Richards was a firm believer in amusement. I am not sure whether she or the Professor originated the delightful motto of the "Feast of Life;" F, E, A, S, T, they would say, Food, Exercise, Amusement, Sleep, Task; the task coming last since without the others it could not be performed at its best. If there is any wiser motto than this for the daily conduct of life, I am not acquainted with it. So, practicing as she preached, she and the Professor and a valued friend went to the theater once a week, regularly, I might almost say religiously. The Copley Square Theater was a convenient and pleasant one for many years. They went to be amused, to see light, wholesome, diverting plays, and found their benefit therein.

I cannot close this brief article without speaking of her beautiful influence over young people. My daughters feel that they owe her a debt that could never be paid. Their affection for her was deep and constant. In seeking Aunt Ellen they knew that they sought a friend whose helpfulness never failed, and whose company they left wiser than they entered it.

EDITORIAL

Annual Meeting. The program committee has worked out the main outline of the program for the twentieth annual meeting of the American Home Economics Association to be held in Asheville, North Carolina, from Tuesday, June 21, to Friday, June 24, with the Battery Park Hotel as headquarters. For Monday, the day preceding the actual meeting, and for Saturday, the day following is close, special trips are being planned, so that those who wish to can enjoy the beautiful mountain country about Asheville as they "travel without trouble" in company with their home economics friends.

Council meetings, at which all members of the Association are welcome, and which are often among the most interesting sessions of the week, are set for Tuesday and Wednesday forenoons. Two business sessions of the Association will be held—a brief one at 11.45 Tuesday forenoon, the longer one on Friday morning at nine.

An annual progress meeting on Tuesday afternoon is an innovation which opens the general sessions. At this a speaker from each section of the Association will present, in a limited number of minutes, a resumé of the year's most important developments in the field covered by that section. Such an annual progress meeting was suggested by Miss Donham in the JOURNAL for July, 1926, and she recommended that each section "hunt out the outstanding accomplishment in your field of home economics, find the person who can present it in a vivid, interesting way, and make it a live topic for every home economist." The present program committee, in adopting the idea, has strategically placed this meeting on the first day so that the Association may from the start have in mind a picture of home economics as a unified whole in which the subjects of the sections play their special but interrelated parts. Needless to say, such a summing up of a year's progress should add greatly to the permanent value of our printed proceedings.

Two other general meetings will be held, an open one on Tuesday evening, and one, for registered attendants only, on Thursday forenoon.

Section meetings will be held on Wednesday afternoon and evening and on Thursday afternoon; round tables are planned for Wednesday evening, and the annual business sessions are to be included in the programs for Thursday afternoon.

No formal banquet will be held, but an extra-special out-of-door supper and entertainment are to take its place on Thursday evening.

Luncheons and dinners will be arranged much as for several years past. The Association luncheon will come on Tuesday noon, that for state presidents on Wednesday, and those for Greek letter societies on Thursday. Scheduled dinners include one for state home economics supervisors on Monday, and those for alumnæ groups on Tuesday.

Representatives and advisers for student clubs will get together at a tea on Tuesday afternoon at the close of the general meeting, and their business meeting will be held on Thursday afternoon.

The president of the North Carolina Federation of Women's Clubs is most hospitably arranging a drive for Association members after the section meetings on Wednesday afternoon.

Details of the program and arrangements will appear in later issues of the JOURNAL and in the *Bulletins* sent to members. Full information regarding railroad rates and hotel accommodations will be given in the April *Bulletin;* it is probable that the summer tourist rates offered by almost all railways will prove more advantageous then the certificate plan for granting half rates on the return fare.

Home Economics for Boys. Nothing in home economics seems to catch public attention so surely as the fact that boys and men sometimes study it, even ask for courses in it. Apparently there is "human interest" in the story of a masculine intelligence stooping to so homely a theme. Or maybe the present popularity of the idea of parental education and its connotation that the male as well as the female parent may have an influence on the developing offspring, give a news value to boys studying food selection. Whatever the reason, the nose for news is getting keen on the scent of such cases and descriptions of home economics courses for boys and men are appearing in all sorts of publications.

Home economics writers have naturally fallen into line. Treva E. Kauffman, the home economics editor of *The High School Teacher*, brought together in her November issue instances from Middletown, Buffalo, and Trumansburg, New York; in the *Western Dietitian* for October Essie L. Elliott told about a course in Los Angeles; and in her *Home Economics Letter* No. 1, 1925, Emeline Whitcomb of the U. S. Bureau of Education described one in Tulsa, Oklahoma. During 1925 Helen Livingstone and Mrs. Jessamine Chapman Williams contributed articles on the subject to the JOURNAL OF HOME ECONOMICS; in 1926 appeared Lena R. Johnson's description of the Bachelor's Club in Ava,

Missouri,[1] and Florence D. Schertz's history of the courses for men at the Oklahoma Agricultural and Mechanical College; and in January, 1927, Jane Hinckley told of experiences in Nebraska. Scattered through "News from the Field" for several years back will be found references to other sporadic attempts. A paper presented by Settie Mae Jenkins at the New Orleans meeting of the American Home Economics Association in January, 1924, told of home economics courses for men and attracted prompt attention from the newspaper people.

The earliest cases of which the JOURNAL OF HOME ECONOMICS knows are two described in manuscript notes in its possession, and as a matter of history they seem worth giving here. They were sent in by Dr. Langworthy, for years a faithful advisory editor, and are headed "Home Economics Work for Boys."

Miss Minta F. McQuiddy, 821 Catherine Place, New Albany, Indiana, under date of October 1, 1919, writes of her experience in this line.

Her work was with high school boys, only juniors and seniors. Three years ago she had two classes of boys in home economics, studying foods and doing practical cooking. During the past year the boys spent two days a week in practical work, one in food study, and two in the study of home and community hygiene. The textbook used was "Home and Community Hygiene" by Miss Broadhurst.

Some boys took up the study for credits, but these soon became very much interested and did good work. They thought it worth while and took readily to the practical cookery, using the knowledge so gained in vacation work. One of them wrote her that there was no course which he took in high school that he valued more than the home economics work.

Subjects most interesting to the boys were: food adulteration; sanitary handling of foods, particularly milk; sanitation of public places; responsibility of the consumer; and mental hygiene.

Professor Buerk, Superintendent of Schools at New Albany, Indiana, approved this work for boys. Miss McQuiddy strongly favors it.

Her students, as a final test of their skill, earned money to buy foods for a formal dinner which they prepared and served to twelve representative men of the city.

Miss McQuiddy found the boys really enthusiastic about home economics.

Miss Lulu M. Williams, 407 West 123d Street, New York City, under date of October 6, 1919, writes of her experience in this line.

For three years she was supervisor of home economics in the rural schools of La Porte County. She visited some 75 schools, giving lesson talks to the

[1] Since this editorial was written a second Bachelor's Club has applied affiliation with the American Home Economics Association.

girls, and she found that the boys would listen and pay attention and really wanted to be included in the class instruction. Realizing that the boys were at the impressionable age, Miss Williams says she recognized it as a good time to teach some fundamentals of better living. In her general talks, therefore, she made it a point to make the boys feel that they were a necessary part of the home and should prepare themselves for their share of its duties and responsibilities in providing food, shelter, and clothing. She found an encouraging response from the boys, and feels that it is proper, necessary, and wise to train the boys—not to do the work of women, but to understand and appreciate women's work and the cooperative spirit that should prevail in the home.

She enjoyed the work with boys quite as much as that with the girls, and believes that when approached in the right way, most boys would be interested in the work, particularly those in the elementary grades. It was all voluntary on the part of the boys she taught; instead of being compulsory, it simply grew out of their interest and expressed desire to learn home economics.

It was not the intention to have the boys do any sewing, but many of them wished to learn this and when the war brought its opportunity, they were able to darn, patch, repair clothing, sew on buttons, and mend rips in baseballs, mittens, and coats, and to knit sweaters and scarfs, and even to make some quilts and sacks for refugees.

The boys were also interested in textiles, learning about cotton, wool, silk, linen, and leather—why their weighted silk ties went to pieces; the meaning of "shoddy," etc.

They felt a certain dignity and independence when informed on home economics subjects. They liked making clothing budgets and brought in good lists, and their parents were pleased about this. The boys thus gained some idea of what they really cost their parents and were inclined to do something to offset this expense.

The food work was done largely in connection with physiology. Hot lunches were served in some of the schools. The study of cereals, milk, and meat substitutes was emphasized.

The boys liked to hear of camp and hotel cooks, tailors, men designers, scout leaders, etc.

It was an interesting fact in her experience that the Polish boys took most eagerly to the home economics training and the German boys were least interested.

Some of her teachers gave their home economics work as reading lessons or as opening exercises. Miss Williams herself gave a general lesson at every visit. Some of the subjects were tied up with agriculture.

If any readers know of other early experiments in teaching home economics to boys or men or any unusual features in more recent ones, will they not send to the JOURNAL brief accounts, including the dates

and the name of the school and the teacher, so that the credit for pioneering may be given where it is due?

Ellen H. Richards and Her Friends. In connection with the campaign to complete the Ellen H. Richards Fund for graduate research fellowships in home economics, several of her personal friends have consented to write for the JOURNAL OF HOME ECONOMICS their recollections of certain aspects of her life and work. The things which her family take special pleasure in remembering are told on page 142 by her sister-in-law, Mrs. Laura E. Richards, whom many of us know as the author of "Captain January," "Geoffrey Strong," "Mrs. Tree," and other delightful stories, of favorite poems from the St. Nicholas of our childhood, and also of the beautiful lines in memory of "Sister Ellen" which the JOURNAL reprinted last December.

In these days when the job-home-family triangle forms the theme of so many heated discussions, the account of how one of the pioneers in jobs for trained women managed to combine an active professional life and generous social service with genuine homemaking, unstinted hospitality, and abundant diversion appears especially significant. The founder of home economics applied in her own home her theory of the value of modern scientific method in household problems; to this she added the warm-hearted unselfishness which gives a home its highest personal values, and at the same time she kept her sense of proportion between work, rest, and play, so that in her home the "feast of life," of which her sister tells, was spread with all of the necessary viands.

Student Clubs. Of the three club reports ranking as the best of those received last summer (see January JOURNAL, page 30), the one from the University of Illinois on page 151 is chosen from those sent by clubs in colleges and universities. Honorable mention in this group of papers is also made of those from the clubs at Iowa State College, Ames, and Alabama Polytechnic Institute, Auburn.

Home Economics Research. In March, 1926, a statement prepared by the Research Committee of the American Home Economics Association was published in the JOURNAL OF HOME ECONOMICS regarding the research in home economics then being started in the various state agricultural experiment stations and agricultural colleges by means of funds available under the Purnell Act. On page 154 of the present issue, the JOURNAL is fortunate in being able to give an account of the present

status of such research prepared from the official records in the U. S. Department of Agriculture by Miss Sybil L. Smith, assistant in experiment station administration, home economics, in the Office of Experiment Stations. In order better to show progress in the various lines of research the material is this year grouped by subjects rather than by states; nevertehless a comparison with last year's statement will not be difficult, and for those especially concerned with such research will provide food for thought as to how fully home economics has as yet utilized the opportunities which it sought so long and which now open in so many directions.

Textile Section Fellowship. The Textile Section of the American Home Economics Association, through its committee on research, offers a fellowship of $300 to be used during the school year 1927–28. The holder is to carry on research at a college or university of recognized standing under the direction of a member of the staff who has made contributions in the field of textile research either personally or through the work of students. The candidate's choice of university will be considered in making the award.

The candidate must be a woman holding at least one degree from a college or university of recognized standing and must have specialized either in textiles or in chemistry or physics with some training in textiles and clothing. Because of the nature of the work to be done, the candidates having the most scientific textile training will be given preference.

The holder of the fellowship will be required to spend the school year of 1927–28 (nine months) at the university chosen, giving at least one-fourth of her time to research on a problem which deals with some aspect of textiles or clothing. She will be required to submit a report of her work (in person, if possible) to the Textile Section at the annual meeting of the American Home Economics Association during the summer of 1928.

Receipt of applications will close April 1, 1927. Requests for application blanks should be sent to Miss Ruth O'Brien, Bureau of Home Economics, Department of Agriculture, Washington, D. C.

OPEN FORUM

Home Economics Club of the University of Illinois. The Home Economics Club of the University of Illinois was organized in 1902 "to further the interests and to promote good fellowship among home economics students." It was an organization of upperclassmen, new members being elected during their sophomore year, and did not function among the home economics students generally. Of the early activities of the Club we now recall the annual Christmas parties, and the joint meetings of the Home Economics and Agriculture Clubs. One of their frequently remembered programs was a debate on the question: Resolved: that the musical jangle from the kitchen is more harmonious than noises of the barnyard. For twenty-two years the Home Economics Club held its meetings every two weeks, with an average attendance of 60 per cent of its 50 to 75 members.

In the fall of 1924 the Club felt that it was not reaching all the girls of the home economics department whom it ought to serve, and who might rightly serve it. The membership was therefore made open to all with the sole requirement of payment of dues. Meetings were held monthly, at each of which some speaker of particular interest to home economics girls was obtained. It was in the fall of 1924 that the Club affiliated with the American Home Economics Association. But neither the membership nor the average attendance showed any increase, and the Club felt that some other change was needed.

Accordingly, the organization of the Club was again changed for the year 1925–26. It was felt that weekly meetings, shorter in length and more varied and interesting in character, with a greater opportunity for the girls themselves to take part, would be advantageous. The general program for the year therefore called for a meeting each week, planned monthly as follows:

First meeting: 1. Business.

2. Talk by a club member, generally an upper classman, on personal experience or work in home economics fields.

Second meeting: Reports, book reviews, reviews of magazine articles of home economics interest, interviews with women prominent in home economics activities, given by the members of the Club.

Third meeting: An outside speaker, faculty or town.

Fourth meeting: Social. An opportunity for the girls to get acquainted with each other.

The membership requirements were also changed. Now any girl in a home economics course, whether or not she is majoring in home economics, may pay her dues and attend all meetings as an associate member, but before initiation as a full member certain requirements must be fulfilled as a means of indicating her real interest in the Club. These requirements are as follows:

1. Have a "C" average. ("A" is high; "E" is flunking.)
2. Attend three meetings a month.
3. (a) Be on a program at least once, or (b) write and have published an article concerning home economics. (This is mainly in connection with our work on the *Illinois Agriculturist Magazine*, as explained later.)
4. Earn five points through work in the Home Economics Club, as follows:

Make a poster.

Bring a new member, the latter to attend three meetings and pay her dues before the point is credited.

Act on a committee.

Serve at a social.

Take part in the program (2 points); for example, a reading, a book report (home economics), report on magazine article, talk on any topic of home economics interest, song, dance, piano solo, taking part in a stunt or play.

Other work of any sort for the Club on the basis of about 1 point for each hour.

This change in the programs and membership of the Club seems to have been the necessary thing to reach all the home economics girls. Our first meeting of the year was a Get-Acquainted Tea for all home economics students and faculty. Two days later we held our first regular meeting, and have done so weekly since. We have a paid membership of over a hundred, and the attendance each week has been over a hundred, including some girls not members of the Club but interested in home economics, who are always welcome to our meetings. The club has become a truly active organization with a variety in its interests and opportunities for work which appeals to a greater number of home economics girls.

We have followed our year's program very closely, but there are certain activities which call for special mention. Our first Get-Acquainted Tea seems to be an unusually desirable feature and will undoubtedly

become an annual affair. The old custom of a big Christmas party was also revived this year and will probably become another annual event. Just before our Christmas vacation we had a supper which the girls planned and prepared themselves and served to about eighty faculty members and students. The upperclassmen put on a stunt representing certain of our faculty at a Home Bureau meeting, which was most thoroughly enjoyed by both students and faculty. Some of the sophomores gave a stunt remindful of the after-effects of a Christmas dinner. Supper, a huge grab-bag left by Santa Claus, toasted marshmallows around an open fire, and our Christmas party was over.

Soon after the Christmas holidays we were fortunate to have Miss Isabel Bevier with us. It was Miss Bevier who during her twenty-one years at the University of Illinois made our home economics department an important one, a woman all of us hear much about and would like to know, but seldom have an opportunity to become acquainted with. It was therefore a great treat to have her speak to us on the afternoon of January 20.

With the new year a new line of activity was opened up for us. The *Illinois Agriculturist*, the University agriculture magazine, had been running a women's page for activities among women in agriculture and home economics. The girls of the Home Economics Club were asked to contribute articles to the magazine and to share in its work, with the idea of organizing a home economics department with a home economics editor and staff in about a year. We have therefore been contributing two or three articles to each issue since that time, and have occasionally helped out in the office when assistance was needed. We have had a good start in this work and hope it will continue to develop.

Out of this connection with the *Illinois Agriculturist* came an invitation from the Agriculture Club to attend one of its meetings. It was the first meeting of this kind that had been held for a number of years. They entertained us with a very interesting program, served us delicious refreshments, and gave us an opportunity to renew a friendship and connection between the departments which had for some time been waning. Early in the new semester the girls of the Home Economics Club were very happy to entertain the Agriculture Club. We gave a short program, including a stunt with girls in blue gingham and boys in blue overalls, music, and a Charleston feature. The rest of the evening we sipped cocoa, munched cookies, and talked and talked until we felt the girls of the Home Economics Club and the boys of the Ag Club were really friends.

The last outside activity of the year undertaken by the Club was a small part in the Better Homes Week program in the cities of Champaign and Urbana. The girls made a large poster representing "Foods that make a 150-pound man," which was exhibited in the business section.

The incoming and outgoing club officers held a picnic at which they talked over the problems of the past year and the plans for the next.

In conclusion it might be well to pass on a few suggestions concerning the things which have been found helpful in building a successful organization in the past year.

1. Good publicity and advertising are needed to insure each girl's knowing about each meeting in plenty of time to plan to be there.
2. Frequent meetings, and short ones, keep the interest alive and the attendance at a high point.
3. Variety in subject and type of programs help to reach the particular interests of each girl at some time and widen every girl's interests.
4. Dues payable for the entire year at the beginning of the first semester make it easier to hold the interest throughout the year.
5. Social meetings are one of the most important factors. Only too often in a large department such as ours (468) the members of the various classes have no other opportunity to become acquainted.
6. Programs of worth while character at every meeting are essential. Straight business, although necessary, is not interesting as a rule.

NONA M. SCHWARZ,
President, 1925–26.

Research in Home Economics at the State Agricultural Experiment Stations. In response to requests for information concerning the nature and extent of the research work in home economics at the state agricultural experiment stations under the Purnell Act (see JOURNAL OF HOME ECONOMICS **17,** 281), the following summary has been prepared from a more detailed report which is to appear in the 1926 Report on the Agricultural Experiment Stations, issued by the Office of Experiment Stations, U. S. Department of Agriculture. In this report are listed all of the Purnell projects pertaining to home economics approved by the office from the time the act went into effect, July 1, 1925, through November 1, 1926.

Before the passage of the Purnell Act research in home economics was being conducted at only four of the 50 state agricultural experiment stations, although at some of the state universities such work had been in progress for several years. In contrast with this, the list of November 1,

1926, indicates that research had been organized in home economics departments at 36 stations, with a total of 82 independent projects. To these should be added four stations at which for administrative reasons research in foods and human nutrition, totalling six projects, had been started in the chemistry department in place of the home economics department. Since November 1 a department of home economics research has been organized and a project approved at one of those four stations, and a research project has been approved at another station not before included. These two projects are not, however, included in the present classification.

The stimulation to research resulting from the work of the joint committee on projects and correlation of research of the Association of Land Grant Colleges and U. S. Department of Agriculture and the sub-committees working under it (JOURNAL OF HOME ECONOMICS, **17**, 505) is shown by the fact that 56 projects are classified as coming under one or another of the national cooperative projects outlined by this committee.

Under national cooperative project 3, The Vitamin Content of Food in Relation to Human Nutrition, are listed 22 projects in 16 states. These include studies of the vitamin content of food materials which have hitherto received little attention in vitamin studies, such as collards, turnip tops, kale, mustard greens, Swiss chard, peaches, cherries, pears; and the effect of ordinary cooking and canning process, cultural methods, degree of maturity, and storage upon the vitamin content of various fruits and vegetables. In addition to the projects coming under this head, there are one or two vitamin studies dealing with such fundamental problems as the influence of the vitamins on the utilization of iron and other compounds from food materials for blood formation and regeneration, and the effect of antirachitic factor and ultraviolet irradiation on calcium metabolism in women.

Under the national cooperative project 4, Rural Home Management Studies, are listed 29 projects at 26 stations. Three distinct projects in this field were at first outlined by the committee in charge and in November, 1926, another project was added. The distribution of the 29 rural home management studies among these projects is as follows: Food consumption and expenditures of farm families, 9; present use of time by farm homemakers, 7; efficiency studies of the household plant, 7; and standards of living and expenditures of farm families, 6. In addition to the help of the committee on Rural Home Management Studies of the Association of Land Grant Colleges in the formulation of these projects, acknowledgment should be made of the services of the division of eco-

nomics of the Bureau of Home Economics in working out the details of the projects and correlating the data already assembled. At five of the stations the home economics departments are cooperating with the departments of animal husbandry in another of the national cooperative projects, Factors which Influence the Quality and Palatability of Meat (JOURNAL OF HOME ECONOMICS **19**, 8).

Of the remaining 26 projects, three are in the field of textiles and clothing. At the Kansas station an interesting study is being made of the protective value against sunburn of various clothing fabrics. At South Dakota there is a project dealing with the kind and quality of materials in women's coats and at Utah one on factors affecting penetration of ultraviolet rays of the sun through animal and vegetable fibers. An economic study at the Oklahoma station dealing with clothing selection might be included in this field. It is to be hoped that as time goes on more will be attracted to this interesting but almost unexplored field of research for which training in chemistry and physics is even more essential than in home economics. Miscellaneous food and nutrition studies, which for lack of space cannot be enumerated, complete the list of projects.

It is too early as yet to speak of results, for very few of the projects have been completed, or if completed have been reported in the literature. This Journal has the distinction of publishing in the February issue one of the first reports of this work in the paper by MacDonald and Crawford (JOURNAL OF HOME ECONOMICS 19, 65) on The Removal of the Onion or Garlic Flavor and Odor from Milk. It is of interest that the director of the Tennessee Station at which this work was done considers it the outstanding research contribution from that station during the year. As far as can be judged by the number of stations in which research in home economics has been organized, the number and type of projects approved, and above all the interest shown by the station directors in the organization of this work and by the older departments at the stations in helpful cooperation, there is ample ground for gratification and encouragement to those who have been particularly interested in the development of research in this field. The real test of the value of the work under way will come when the projects are completed and judged, as was the Tennessee project, by what they actually contribute to the purposes for which the Purnell funds were granted.

SYBIL L. SMITH,
Office of Experiment Stations,
U. S. Department of Agriculture

Social and Economic Problems of the Home. A precedent was established when the Committee on the Social and Economic Problems of the Home, of the American Home Economics Association, held a joint meeting with the Family Section of the American Sociological Society at the general meetings of the social science associations in St. Louis on December 29, 1926. The general topic for discussion was "The Effect of the Outside Work of Married Women on the Home." If one may judge from the fact that this meeting was the most largely attended luncheon session of the week, the topic was of interest to many.

The chairman, in opening the discussion, stated that the phenomenon of married women working outside the home was a natural outgrowth of the changes in our industrial organization which have resulted in the homemaker's being more actively engaged in directing family consumption and much less in producing commodities which previously added in terms of direct money value to the family income. It is coming to be an accepted fact in industry that it is economic necessity which is driving women into outside employment. Upon this assumption there are before us the alternatives of leaving things as they are, which means that the married woman is trying to carry two jobs; or of developing some system of family wage or mother's pension and thus have industry or the state replace what the homemaker used to contribute to the family income; or of making conditions in industry as good as possible, and at the same time entering that neglected economic field, the home, and by developing outside agencies, public nursery schools, and so forth, making it possible for the mother to earn either upon a part-time or a whole-time basis and still be able to conduct her home and care for her children.

Professor Arthur J. Todd, of Northwestern University, who has had active experience in industry, pointed out the increase in the number of married women gainfully employed. They work because they need the money and because industry needs them. He stated that one of the problems of management in the case of the married woman in industry is absenteeism on Saturday when the woman stays home to care for her house. And he asked if the five-day week would not be one way of solving this problem. From the point of view of society there is the question of proper care for the children. The nursing mother and her infant can be cared for in the factory without great difficulty, but the old fears of and prejudices against the pregnant woman make her a real problem. Dr. Todd hopes that there may be developed in the near future an institute for research into family problems which will investigate this many-sided question of the married woman in industry.

Professor Ernest R. Groves, of Boston University, spoke on the psychological aspects of the work of married women. As he said, his experience has been not with industrial families but with those of the business and professional world. He was optimistic as to the final outcome. "The restlessness of family life within recent years is the outgrowth of the normal progress of society. It will lead to temporary difficulties in married life which will eventually adjust themselves."

Professor Groves believes that not only the economic motive but the desire to work as a matter of personal satisfaction accounts for the married professional woman. So far as the children are concerned, he felt that their care or neglect was more a matter of the personality of the mother than whether she was employed outside the home or not.

Much interest was aroused in Professor Groves's analysis of the relations of the husband and his professional wife. When a woman feels superior to her husband because she has gained greater distinction, there is an immediate decrease of affection. But where there is true family unity, greater distinction on the part of one or of the other in the eyes of the public will be a small matter, lost in a sense of family solidarity and interest in the cooperative undertaking.

The meeting closed with a most happy summary by Lita Bane, president of the American Home Economics Association. Speaking as she was to a group of experts from another field, sociology, she reviewed the objectives and methods of home economics and pointed out the present increasing emphasis upon the social problems of the family. She suggested the need for close cooperation between the two fields, especially in the fundamental task of defining the essentials of a home and in determining how those essentials were to be maintained.

CHASE GOING WOODHOUSE, *Chairman,*
Committee on Economic and Social
Problems of the Home

BOOKS AND PERIODICALS

BOOKS RECEIVED

The Folk High Schools of Denmark and the Development of a Farming Community. By HOLGER BERTRUP, HANS LUND, and PETER MANNICHE. With an introduction by Sir MICHAEL SADLER. London: Oxford University Press, 1926, pp. 168. $2.00 (American Branch: 35 West 32d Street, New York City).

Important as probably the first book in English to give a well-informed, comprehensive account of the development, operation, and influence of an often-cited form of adult education as it has grown up in a country predominantly rural.

Handbook of Rural Social Resources. Edited by HENRY ISRAEL and BENSON Y. LANDIS. Chicago: University of Chicago Press, 1926, pp. 204. $1.00, paper edition.

A collection of fourteen papers by recognized authorities on different phases of rural life, to which is added in Part II a convenient statement of the program of the American Country Life Association and of the organizations belonging to its affiliated National Council of Social Agencies Engaged in Rural Social Work. Articles of specific interest to home economists include Farmers' Standards of Living by E. L. Kirkpatrick; The Development of Rural Art by Anna Mansfield Clark; Organized Rural Recreation, by Lee F. Hammer; Farm Women's Organizations, by Grace E. Frysinger; and Some Agricultural Policies of European Nations, by Asher Hobson.

How to Get Ahead Financially. By WILLIAM A. SCHNEDLER. New York: Harper and Brothers, 1926, pp. 172. $2.00.

A sensible discussion of how to handle savings from moderate incomes, by the counselor on personal financial problems to the employes of the Western Electric Company, New York; unusual features are statements from the users of household budgets regarding their value, calculations of the cost of purchases made on the installment plan, and a comparison of different forms of life insurance.

Profits. By WILLIAM TRUFANT FOSTER and WADDILL CATCHINGS. Boston: Houghton Mifflin Company, 1925, pp. 465. $4.00.

The eighth in the series of publications from the Pollak Foundation for Economic Research, developing the thesis that "progress toward greater total production is retarded because consumer buying does not keep pace with production. Consumer buying lags behind for two reasons: first, because industry does not disburse to consumers enough money to buy the goods produced; second, because consumers, under the necessity of saving, cannot spend even as much money as they receive. . . . . Chiefly because of shortage of consumer demand, both capital and labor restrict output, and nations engage in those struggles for outside markets and spheres of commercial influence which are the chief causes of war." The authors have summarized their argument in "The Dilemma of Thrift" and satirized certain parts of it in "Old King Cole in Trouble," articles which appeared in the *Atlantic Monthly* during 1926.

Steps in Industry. By EDMOND E. LINCOLN. New York: The Macmillan Company, 1926, pp. 215. $2.00.

An attempt by a member of the faculty in the Harvard School of Business Administration to present the "principles which govern our wealth-getting and wealth-spending activities" in a form acceptable to the average man who works to produce such wealth. Emphasizes the contributions made by both capital and labor, the problems of business management, and the idea of business as a profession.

Diet. The Staff of Life. By EWALDE H. VON KLEIST. Los Angeles, California: System Service Company, 1926, pp. 387. $5.00.

A volume described by the author as "mainly a compilation of the latest findings and data from twenty-three prominent and world renowned authorities in the Science of NUTRITION," introducing five original "Laws of Diet," of which the fourth reads "USE ONLY ONE KIND OF STARCH AT A MEAL. *Never eat potatoes and bread together.* In a strict diet meat should be taken only with items from Group ONE [fruits and vegetables]. It is further suggested that with starchy food *raw* tomatoes may be used, *but never cooked tomatoes or tomato sauce.*"

English Smocks. With directions for making them. By ALICE ARMES. Leicester, England: Dryad Handicrafts, 42 St. Nicholas Street, pp. 15. 2/–.

A pamphlet by the handicrafts organizer of the National Federation of Women's Institutes, which tells of the development of the smock as the working garment of the English laborer and the decorations used in different counties to distinguish members of such trades as those of waggoner, gardener, shepherd, milkmaid, and grave digger. Some of the designs are illustrated from photographs and show outline effects as well as ornamental shirred work. Included also are practical directions for making smocks and seven full-size patterns of typical embroidery designs. Interesting to students of the history of costume or embroidery.

Glass and Glazing. By EMANUEL E. ERICSON Peoria, Illinois: Manual Arts Press, 1926, pp. 146. $1.75.

A practical handbook for school and home use in which are described the equipment and methods used in cutting and setting glass and restoring mirrors, with chapters on the manufacture of window and plate glass and a brief history of glass making.

A Short History of Marriage. By EDWARD WESTERMARCK. New York: The Macmillan Company, 1926, pp. 327. $3.50.

Marriage as a social institution, presented much as in the author's standard and longer "History of Human Marriage," but without the other aspects of the broader subject or the references to authorities found in the earlier volume. The analytic table of contents and the copious index add to the value of the book for reference.

Guidance for College Women. By MABELLE BABCOCK BLAKE. With an introduction by WILLIAM A. NEILSON. New York: D. Appleton and Company, 1926, pp. 285. $2.50.

A description of a recent educational development resulting from "the rediscovery of the individual student" and the desire of the colleges to provide for the different needs of such individuals. Includes a summary of the present situation based in part on the returns of questionnaires and on case studies made by the author; an analysis of guidance as an agency for the development, the organization and administration of a personnel department, together with various record forms and a bibliography. Written by the personnel director at Smith College and primarily concerned with guidance for women students, but in large measure applicable to men's colleges as well.

What Girls Can Do. By RUTH WANGER. New York: Henry Holt and Company, 1926, pp. 293. $1.25.

Possible occupations for high school girls, including desirable training, the probable remuneration, and possibilities for advancement, described by the head of the social science department in the South Philadelphia High School for Girls.

The Delicatessen Husband and Other Essays. By FLORENCE GUY SEABURY. New York: Harcourt, Brace, and Company, 1926, pp. 269. $2.50.

ABSTRACTS FROM PERIODICALS

FOOD AND NUTRITION

Raitt, E. I. Feeding problems in college communities. *Western Dietitian*, **1**, No. 6, 11 (1926).

A dietary survey similar to the one reported by Kramer and Grundemeier in JOURNAL OF HOME ECONOMICS **18**, 18 (1926) was made during January and February, 1926, at the University of Washington in 12 organized houses for women students, serving a total of 1200 meals daily. The minimum, maximum, and average energy values (as averaged by houses) were respectively 2249, 3160, and 2667 calories per person per day. The protein consumption was even higher than in the Kansas study, averaging 120 gm. per 3000 calories. On the same basis only one of the 12 groups fell below the Sherman standard for calcium, 3 for phosphorus, and 5 for iron. In actual consumption, however, 5 groups fell below the standard for calcium, 8 for phosphorus, and all but one for iron. The cost per person per day ranged from $0.32 to $0.49 with an average of $0.427. The houses least successful in the mineral allowance all spent above the average, while of those furnishing a sufficient supply of minerals 2 were above and 3 below the average total expenditure. A comparison of the distribution of total food expenditures among the different classes of food with the distribution recommended by Sherman led to the conclusion that there should be a slight reduction in the amount of meat and an increase in vegetables and fruits in season, and in eggs, milk, and cheese.

Olin, A. Nutritive value of Oriental foods. *Western Dietitian* **1**, No. 6, 23 (1926).

A comparison of Oriental with Occidental food habits, with emphasis on some of the advantages of Oriental methods of foods preparation and preservation. Data on the chemical composition and nutritive value of typical Oriental foods are tabulated and the distribution of foods in the middle-class diets of North China as reported by Adolph in JOURNAL OF HOME ECONOMICS **17**, 1, 1926, is compared with estimated values for South China. The latter show a slightly lower consumption of cereals and a higher consumption of fruits and vegetables, meats, and fish, and fats and sugar.

Brooke, R. Infant feeding in the tropics. *Am. J. Trop. Med.* **6**, 403 (1926).

An interesting discussion of the special problems of infant feeding in the tropics as compared with temperate zones. In the opinion of the author these concern quantity and substitutes. Breast feeding is considered even more important in the tropics than in cold climates. Four-hour intervals between nursing are recommended on the ground that most disturbances in breast-fed infants are due to overfeeding and that the caloric requirements in the tropics are somewhat lower than in cold climates. If resort must be made to artificial feeding an allowance of 1½ oz. of whole milk per day per pound weight of the child is recommended. When fresh milk is procurable it should always be sterilized. Dried milk is recommended as the best substitute for fresh. In this connection it is noted that coincident with the gradual change from condensed milk to dried milk (Klim) in the Canal Zone, beginning the latter part of 1923, there has been a gradual decrease of over 50 per cent in the incidence of malnutrition and nonspecific diarrhea among infants under two years of age at the Ancon Hospital.

Formulas for milk modifications using fresh milk or Klim with Karo as the added sugar, lactogen formulas, and special formulas for the treatment of various digestive disorders are included.

Mitchell, H. H., Beadles, J. R., and Keith, M. H. The value of cocoa and chocolate as sources of protein in the diet. *J. Biol. Chem.* **71**, 15–31 (1926).

As determined by the methods employed in previous studies (see J. HOME ECON. **18**, 713) the nitrogen of cocoa was found

to have an average coefficient of digestibility (corrected for metabolic nitrogen of the feces) of 38 and a biological value of 37. A mixture of cocoa and milk containing equal parts of nitrogen and fed at an 8 per cent crude protein level gave a coefficient of digestibility of 63 and biological value of 70, figures close to the estimated value on the assumption of no supplementary action between the two.

Mitchell, H. H., and Beadles, J. R. The protein value in nutrition of beef liver, beef heart, and beef kidney. *J. Biol. Chem.* **71**, 429–435 (1927).

The average biological values obtained in this study for beef heart, beef kidney, and beef liver at an 8 per cent level were 74, 77, and 77 respectively, as compared with previously reported figures of 74 for pork muscle, 69 for beef muscle, and from 83 to 86 for milk. [For further discussion of the significance of these data see page 122.]

Mitchell, H. S., and Schmidt, L. The relation of iron from various sources to nutritional anemia. *J. Biol. Chem.* **70**, 471–486 (1926).

In this study rats from a stock fed a diet of whole milk supplemented by salts of manganese, fluorine, silicon, aluminum, and iodine (a diet producing severe anemia in the second generation) were given soon after weaning supplements of various iron-containing foods and iron salts in amounts calculated to furnish 0.4 mg. of iron daily. The effect of these iron-containing compounds on blood regeneration was tested by weekly hemoglobin determinations.

Of the organic sources of iron tested molasses, meat, and ovoferrin were ranked as very good in the availability of their iron, egg yolk and spinach good, and raisins and dates uncertain because of incomplete consumption. The availability of the inorganic sources of iron appeared to depend upon their solubility, the readily soluble ferric chloride, and ferric ammonium citrate bringing about a prompt increase in hemoglobin count; and the insoluble compounds, ferric oxide and ferric carbonate, a more irregular and less marked response. It is suggested that the availability of iron in the animal organism depends more upon its solubility than upon whether it is in organic versus inorganic combination.

Koessler, K. K., Maurer, S., and Loughlin, R. The relation of anemia primary and secondary to vitamin A deficiency. *J. Am. Med. Assocn.* **87**, 476–482 (1926).

The theory upon which the experimental work on rats and the specific recommendations for the dietary treatment of pernicious anemia are based is that severe anemias are the result of chronic vitamin deficiency, particularly vitamin A. This theory is thought to be in harmony with bacterial poison theories recently advanced since tissue changes brought about by chronic vitamin deficiency are considered to facilitate the action of these poisons.

A system of dietary management of pernicious anemia based upon the vitamin deficiency theory is recommended. This includes cod liver oil 5 cc. four times daily, 6 yeast tablets equivalent to 200 mg. of concentrated yeast extract, 50 or 60 gm. of butter, 6 or 7 glasses of milk, ½ pint of cream and 2 or 3 egg yolks or whole eggs, together with an abundance of fruits and vegetables, whole wheat bread made with milk, and in place of muscle meat, liver, kidney, sweetbreads, or brains.

Minot, G. R., and Murphy, W. P. Treatment of pernicious anemia by a special diet. *J. Am. Med. Assocn.* **87**, 470–476 (1926).

A diet composed of foods rich in complete protein and iron, particularly liver, and containing an abundance of fruits and vegetables and very little fat, is said to have given promising results in the treatment of pernicious anemia in a series of 45 patients who, at the time of the report, had been receiving the diet for periods varying from 6 weeks to 2½ years. A rapid increase in red blood corpuscles and hemoglobin count and improvement in clinical appearance were evident in all cases.

Tubbs, T., and Bellinger, E. Preparation of calves' liver for pernicious anemia diets. *J. Am. Dietetic Assocn.* **2**, 165 (1926).

Several recipes are given for preparing calves' liver in palatable form for continued use in the dietary treatment of pernicious anemia recommended by Minot and Murphy. The recipes, which are said to be easily prepared either in the hospital or home kitchen, include liver juice, broiled liver, scraped or sieved liver, liver stuffed in green peppers or tomatoes, clear liver soup, and creamed liver soup.

S. L. S.

ECONOMIC AND SOCIAL PROBLEMS OF THE HOME

Johnson, R. H. The eugenics of the city. *Am. J. Sociol.* **32**, No. 1, Part 2, 66–76 (1926).

Mental tests indicate that city people are superior to country dwellers as do the data showing the relative percentage of great men produced in the two environments. This fact is explained by the emigration of the brighter intellects from the country to the city. But the city is destructive to the fecundity of the family. It tends to increase the age of marriage and to reduce the marriage and birth rates. If cities continue to grow, and the selective process continues, the quality of the population will be lowered unless a new eugenic ideal becomes general.

Zorbaugh, H. W. The dweller in furnished rooms: an urban type. *Am. J. Sociol.* **32**, No. 1, Part 2, 83–89 (1926).

This paper gives the results of a study of the rooming house area on the Lower North Side in Chicago. This district contains 1,139 rooming houses in which 23,000 people reside. Seventy-one per cent of all the families in the district take roomers. By a house-to-house canvass it was discovered that 52 per cent of these dwellers in furnished rooms were single men, 10 per cent were single women, and 38 per cent were "couples." Sixty per cent of the latter were unmarried. As might be expected, this is a childless area although the majority of the population are in the productive period, from 20 to 35 years of age. Economically, this is a white-collar group and contains many students. It is a transient group, the whole population turning over every four months. The social isolation of this group of people is well-nigh complete, which means, of course, little social control as well as loneliness and restlessness.

Faris, Ellsworth. The concept of imitation. *Am. J. Sociol.* **32**, 367–378 (1926).

There are many types of imitative behavior and so-called imitation is the result of many types of conditions and causes. Furthermore, these same causes and conditions may result in non-imitative behavior. There is no instinct to imitate and all the uniformities which have loosely received the name of imitation need interpretation as do the non-uniformities growing out of the same process. Similarities of behavior need explanation, but there must be extensive research to clear up the clouded issues.

Peat, H. Economic welfare and family responsibility. *Econ.* **18**, 269–284 (1926).

Family welfare is a variable which cannot be adequately charted without a more thorough exploration of family economics. A cross section of the community with an agreed poverty line as the datum level and the scale of economic welfare extended upward from it has been the usual method of showing the results of the industrial system on people's lives. What we should have is a historical view of changes in family prosperity with changes in family responsibility. This study is offered as a substitute for such a historical view. It gives the results of a survey of the state of affairs by a classification by age-groups of the families in the mining village of Stanley, County Durham, England, in 1923.

The families were sub-divided according to the age of the male head of the family to bring out the relation of family responsibility to the age of the householder. The

number of dependents—adult and children—were reduced to their common measure of "food adults" on the scale used in Bowley's "Livelihood and Poverty." Among the conclusions were the following: The age of maximum family responsibility is between 40 and 45. The period of heavy responsibility lasts through about 12 years. The range of economic welfare is very great throughout the life of the chief wage earner, because of the great range in family responsibility. Welfare is greatest when he is about 55, when the subsidiary earners are adults and have not yet left home. There is a second minimum after the age of 60, when most of the children have married and left home. Broken families are comparable in point of economic welfare with normal families at the time of greatest family responsibility. The lowest 25 per cent of the broken families are far below the lowest 10 per cent of the normal families, which shows the desirability of widows' pensions before family wage schemes.

Vlasto, O. Family allowances and the skilled worker. *Econ. J.* **36,** 577–585 (1926).

Before the family allowance scheme nears practical realization there will have to be a decision whether the allowances shall be paid at a flat rate and, if so, what standard shall be aimed at, or whether they shall be paid at differential rates and, if so, whether the needs standard of the family shall be judged according to the breadwinner's wages or his grade of occupation. The total family income under the family allowance system would consist of the competitive wage of the breadwinner together with an extra amount provided in respect to dependents. The supporters of the system have not spoken with an assured voice on this question of flat versus differential rates. Some advocates shirk the difficulty by asserting that the idea of the scheme is the value of maternity and childhood independently of all forms of productive services. But there remains the question, "Is the value of the mothers and children in the lowest grades (which derive a relative advantage from the flat rate) greater to the nation than the mothers and children of the higher grades?" The flat rate alone presents its difficulties. The allowance system has been described as "the only possible way of combining a minimum wage based on need with a possible maximum based upon effort and the value of a man's work." But the elasticity of the phrase "minimum based on need" has baffled countless experts.

Loans for small borrowers. *Monthly Labor Rev.* **23,** 925–937 (1926).

Death, sickness, and other emergencies may upset the best household management. At such a time the average man of small income can rarely obtain help from the ordinary banking institution. The two avenues of relief have been charity and the loan shark. One solution of this problem is the cooperative credit society usually called the credit union. Since 1921 there has been a widespread development of these societies. In 1925 there were 107,799 members, the share capital was 11 million dollars, and the loans more than 20 millions.

Woman's Place. *Survey* (Graphic number) **57,** 257–352 (1926).

This December number is given over to a discussion of some of the most fundamental economic and social problems of woman and the family by 21 well-known men and women. The women contributors are wives and mothers who are also professionally successful in medicine, journalism, psychology, economics, social work, and public welfare. The articles include a resumé of the present economic situation of women by Mary Ross, under the title, "Shall we join the gentlemen?" one on "Changing marriage," by Beatrice Hinkle, "Mothers who must earn" by Helen Glenn Tyson, "Wasting women," by Stuart Chase, "The new profession of homemaking," by Chase Going Woodhouse, and a symposium on "Four ways to support a family." The latter includes "The husband's wage," by William F. Green, "Mothers' pensions," by Agnes L. Peterson, "The family allow-

ance," by Paul H. Douglas, and "The parents' wages," by Alice Beal Parsons.

Noyes, C. R. Financing prosperity on next year's income. *Yale Rev.* **16**, 227–242 (1927).

The process of mortgaging the future has proceeded apace since the war. The two factors responsible for the change are: 1. The change in terms of automobile sales from cash to deferred payment; 2. the development of finance companies to deal in deferred payment paper. The latter have enabled retailers to extend liberal terms to the consumer-purchaser in a wide range of articles. It has extended beyond the automobile to all the expensive equipment for the home and even to clothing and jewelry. "It is estimated that 80 per cent of all phonographs, 75 per cent of all washing machines, 65 per cent of all vacuum cleaners, and 75 per cent of all furniture is sold in this way." The volume of retail sales on the deferred payment plan in 1925 is estimated at four billion dollars for automobiles, three billions for homes, and three billions for household equipment. The debt outstanding at the end of the year for automobiles and household equipment was about three billion dollars, or $125 for every family in the country.

The manufacturers and retailers were driven to adopt this plan because production was exceeding consumption. The arguments used for it usually assume that the household would be unable to acquire these goods without credit. But an automobile costing $560 cash will cost 12 per cent, or $65.25, more under the deferred payment plan. It costs that amount to get the use twelve months earlier. In the case of a $5500 home the "easy payment plan" costs 10 per cent more than cash. In the case of furniture and musical instruments the prices are from 11 to 33 per cent higher.

The partial payment plan is not a boon to society. Whatever part of next year's income is spent this year cannot be spent next. The volume of consumption is only increased in those years in which the debt carried forward increases.

H. K.

CHILD DEVELOPMENT AND PARENT EDUCATION

Gray, William S. Training and experience that prepare for reading. *Childhood Educ.* **3**, 210–214 (1927).

A discussion of the character of the training which should prepare children for reading and whether it properly belongs in the kindergarten or the first grade.

Holmes, Margaret C. Investigation of reading readiness of first grade entrants. *Childhood Educ.* **3**, 215–221 (1927).

One-fifth of first grade entrants are found not yet ready for reading, so some adjustment in the course of study or requirements for admission to the grade should be made.

Baldwin, Bird T. Preschool psychological laboratories at the University of Iowa. *Childhood Educ.* **3**, 232–236. (1927).

A description, with illustrations, of the work of first preschool laboratory offering excellent conditions for the development of children, combined with opportunities to study their development.

Frederick, J. G. What is your boy dreaming about? *Children* **2**, 7–8 (1927).

Since the vivid dream of a boy, the result of some specific outside stimulus, may produce a permanent mutation of character, it is well neither to ridicule nor to place too great importance on his dreams.

Richardson, Frank H. When a child refuses to eat. *Children* **2**, 9–10 (1927).

A simple definite régime by which the child who refuses to eat may be reformed.

Richardson, Frank H. The nervous child. *Hygeia* **5**, 17–19 (1927).

The first of a series of articles treating childhood problems, in which "nervousness"

is taken as the first sign of a child's inability to deal successfully with his environment.

Fowler, E. P., and Fletcher, A. Three million deafened school children. *J. Am. Med. Assocn.* **87**, 1877–1882 (1926).

The findings of surveys are given which show that 15 per cent of all school children have hearing defects; the detection and medical handling of such defects are discussed, and results of tests presented.

Newhart, Horace. Diagnostic school clinic in the public schools as a factor in conservation of hearing. *J. Am. Med. Assocn.* **87**, 1882–1884 (1926).

Regular periodic examinations of the ears, especially of the young, afford an effective means of conserving hearing. This might well be provided through the schools and such a procedure should have the support of the medical profession.

Huber, Miriam B., and Chappelear, Claude S. Children's magazine reading. *J. Educ. Method* **6**, 145–149 (1926).

A study of children's interests in current literature as shown by the choice of magazines made by public school children from different localities. Wide interest in an undesirable type of magazine raised the question of the school's responsibility in developing desirable standards of choice.

Slocombe, C. S. The measurement of intelligence. *J. Educ. Psychol.* **17**, 600–607 (1926).

A consideration of the efficiency of tests as a measurement of general intelligence with a comparison of nine American tests, in which it is shown that even when a combination of the five best tests is used there is a possible 10 per cent error in measurement. Five methods by which measures of intelligence may be improved are outlined.

Hall, Irene, and Crosby, Amy. A study of the causes of inferior scholarship of pupils in low first grade. *J. Educ. Res.* **12**, 375–383 (1926).

Teachers in Kenosha, Wisconsin, reported, during 1924–25, inferior mental ability of the children of this grade. An intensive study of the scholarship rating of children born from 1911 through 1919 showed a general downward trend in scholarship. The teachers and school requirements remained the same during the period studied. Failures due to ill health were greatest among children born in 1914 and 1915, those due to inferior mentality among those born in 1917 and 1918. Non-attendance was a negligible factor. The physical condition of the children and their home conditions were better in the later years. The older siblings in families of failing children were found to be mentally their superiors. That war stress and hysteria has stamped the minds of these children, practically all of whom were of foreign-born parents, seems possible, though the data are insufficient for such a conclusion.

Aldrich, C. A. The prevention of poor appetite in children. *Ment. Hyg.* **10**, 701–711 (1926).

Chronic anorexia usually develops when food has been forced upon a child whose normal appetite has been lessened by some definite but unrecognized physical or mental condition. It may be avoided by cultivating healthful attitudes toward food. Food should not be urged on the child and refusal to eat should be reported as a sympton of illness. When it occurs a marked reduction should be made in the amount of food allowed. In the care of nursing infants, occasional bottle feedings should be given to make weaning easy. New foods should be introduced gradually. After the first year the child's appetite should be the guide to the amount of food; he should be allowed to follow his own choice among foods of a given type; he should be taught early to feed himself and should be left alone at meals. Emotional scenes at meals must be avoided. During five years' practice the author has found that in 199 consecutive cases this treatment resulted in an average overweight of 3.6 pounds with no cases of malnutrition except in children with chronic disease. Propaganda against forced feeding is needed.

Jones, Mary Cover. The development of early behavior patterns in young children. *Ped. Sem. & J. Genetic Psychol.* **33,** 537–585 (1926).

Data are presented tracing the development in infants of smiling, three types of eye coordination, blinking, thumb opposed, reaching, and sitting, and comparison is made between these and biographical records and with other standards. Boys smile at a slightly earlier age than girls, negro children earlier than white. Girls are slightly more precocious in reaching than boys. The first five patterns appear and complete development is attained by the fourth month; the last three begin near the end of the third month, the developmental period lasting through the tenth month. The results suggest that early development in one trait is likely to be accompanied by early development in others and that there is a positive relationship between this and general intelligence.

Tudor-Hart, B. E. Are there cases in which lies are necessary? *Ped. Sem. & J. Genetic Psychol.* **33,** 586–641 (1926).

A discussion and comparison of answers given to this question by Viennese children 7 to 12 years of age and American children 11 to 20 years of age.

Chambers, Edward V. Study of dishonesty among students of a parochial secondary school. *Ped. Sem. & J. Genetic Psychol.* **33,** 717–728 (1926).

Tentative conclusions from a limited test show prevailing willingness to cheat if opportunity is afforded, in spite of systematic religious training.

Griffitts, Chas. H. The influence of family on school marks. *School & Soc.* **24,** 713–16 (1926).

There is a greater resemblance between school marks of pairs of adjacent children in a family than between pairs of non-adjacent children, and this is considered due to environmental factors only. The average mark of children in small families is higher than that of children in large families.

Paynter, Richard H., Jr. Humanizing psychology in the study of behavior problems in children. *School & Soc.* **24,** 567–571 (1926).

A résumé of the contribution of the new psychology to education.

Van Waters, Miriam. Parents in a changing world. *Survey* **57,** 135–40 (1926).

An interesting study of the family as seen through the juvenile court.

Williams, Frankwood E. What are parents for? *Survey* (Graphic number) **57,** 307–9 (1926).

Parents may, but seldom do, maintain emotional freedom themselves and allow their children to develop, guided but not hampered, their own potentialities.

Wile, Ira S. As children see it. *Survey* (Graphic number) **57,** 312–3 (1926).

Case studies of emotional disturbances between child and home.

Angell, Katharine S. Home and office. *Survey* (Graphic number), **57,** 318–20 (1926).

One woman's successful achievement of home, motherhood, and a full-time job.

While mothers are working. *Survey* (Graphic number) **57,** 321–3 (1926).

Photographs of nursery school activities.

Barnard, Eunice F. The child takes a nurse. *Survey* (Graphic number) **57,** 324–6 (1926).

The nursery school comes to offer the child better physical, mental, and emotional development than the home can provide, not to free the home from the care of the child.

A Triple Alliance. *Times* [London] *Educ. Supp.* **605,** 518 (1926).

Parents, teachers, and business men, all vitally concerned with and contributing to the education of children but often at apparent variance, would mutually benefit from an organization for the discussion of their problems. H. R. H.

NOTES AND CLIPPINGS

U. S. Children's Bureau. "Baby's Daily Time Card" was the general title of twelve brief articles on the routine care for children from birth to two years old recently syndicated for newspaper use by the U. S. Children's Bureau. The set is also issued in chart form as Chart 14, which may be obtained on application to the Bureau at Washington.

Suggestions for Child Study Groups. The Child Study Association of America, 509 West 121st Street, New York City, has issued a pamphlet of suggestions for planning, organizing, and conducting groups for child study entitled "Child study groups: a manual for leaders," which has a foreword by Cecile Pilpel, and sells at 25 cents a copy. *Children, The Magazine for Parents*, 353 Fourth Avenue, New York City, has published "Group study for parents," by Mrs. Eva B. Hansel, which it sells for 10 cents a copy.

Children's Book and Music Lists. "Books for Young Readers" (boys and girls from seven to twelve) by Elsa H. Naumburg, and "Music for Children," by Doris Simminson and Lilla Belle Pitts, contain lists carefully prepared for the use of parents, teachers, and others interested in children, and are issued and sold for 35 cents each by the Child Study Association of America, 509 West 121st Street.

Better Homes in America. For the 1927 campaign, the dates of which are April 24 to May 1, two guide books have been issued; one for cities and towns and one for rural communities and small towns. Copies may be obtained for five cents each from Better Homes in America, 1653 Pennsylvania Avenue, Washington, D. C.

Score Cards for Clothing. The demand was so great for the mimeographed "Score cards for judging clothing selection and construction" issued last year by the U. S. Bureau of Home Economics that this material has now been printed as Miscellaneous Circular 90 of the U. S. Department of Agriculture. Cards, twenty in all, are given for judging four kinds of revues; complete costumes for children, misses, and adults; layettes; shoes; hoisery; all the types of garments commonly made in class or club work; buttonholes, darns, patches, and other handwork; and group exhibits of clothing and household textiles. The foreword by Gertrude L. Warren, Office of Cooperative Extension Work, suggests that the cards will help "to establish standards for economical, becoming, and healthful apparel." This circular has been prepared especially for extension workers and teachers of clothing and is free on request to the Office of Publications, U. S. Department of Agriculture, Washington, D. C.

Window Curtaining. "Principles of Window Curtaining" by Mary Aleen Davis has recently been prepared in the textiles and clothing division of the Bureau of Home Economics and issued as Farmers Bulletin 1516. The illustrations show different types of window materials and shapes of curtains, and method of finishing and hanging. Copies of the bulletin may be obtained on application to the U. S. Department of Agriculture, Washington, D. C.

Lacquer Coatings for Floors. An experimental study of the durability of lacquers on exterior wood and wicker surfaces coated with various primers was made by Henry A. Gardner for the Scientific Section of the Paint Manufacturers Association of the United States, National Varnish Manufacturers Association cooperating, and published in August, 1926, as Circular No. 276, by the Paint Manufacturers Association, The Bourse, Philadelphia. Although the work is not extensive enough to permit general conclusions, it is suggestive for students of household equipment.

NEWS FROM THE FIELD

GENERAL

Conference on Negro Extension. The first all-South meeting for district negro extension workers was held at Orangeburg, South Carolina, January 26 to 28, with work among negro farm families as the main theme. State directors of extension were in attendance, and those from the U. S. Department of Agriculture included Dr. Warburton, Dr. C. B. Smith, Mr. O. B. Martin, and Mrs. Ola Powell Malcolm.

National Canners Association. Home economists on the program of the twentieth annual convention held in Atlantic City January 24 to 29 were Grace MacLeod of Teachers College, Columbia University, and Marie Dye of Michigan State College.

Pan-American Child Congress. The Congress, which was to have met in Havana in February, and which was noted in the JOURNAL for January, has been postponed until December 7 to 14, 1927, on account of the recent earthquake in Cuba.

Emma Dolfinger. Miss Dolfinger, well known to home economists through her work with the American Child Health Association, died on January 19 at her home in Forest Hills, Long Island. In announcing her death, the Association said, "The cause of Child Health has thus lost in this wise and gracious woman, a leader of clear vision and steadfast devotion, and her friends a source of inspiration and strength."

American Books of 1925. The American Library Association is annually requested to send to the Committee on International Intellectual Cooperation of the League of Nations a list of 40 American books for the world list of 600 titles. A trend of the time is shown by the fact that among those chosen from 1925 two deal with the modern psychology of child development, Creative Youth by Hughes Mearns and The Mental Growth of the Pre-School Child by Arnold L. Gesell. Since classification is under heads fixed by the International Committee, Mearn's book appears under Social Science and Gesell's under Philosophy.

Canadian Women's Institutes. Mrs. David Watt, of Birtle, Manitoba, national president, has received a degree from the Manitoba Agricultural College in honor of her work in agriculture, with acknowledgment of the community value of the Women's Institutes. Cora Hind of Winnipeg is the only other woman thus honored.

Essay Contest. The Soft Wheat Millers Association is conducting an educational essay contest in "Home baking, its economic and social value." Further information may be obtained from Miss See Rice, Soft Wheat Millers Association, 1527 Broad Street, Nashville.

Fellowships at Iowa State College. The home economics division announces several teaching fellowships for the year 1927–28, carrying a stipend of $540 for the nine months. They are offered in the departments of applied art, foods and nutrition, household administration, and textiles and clothing. Application should be made to the Dean of the Division of Home Economics, Iowa State College, Ames, Iowa.

Fine Arts Collections and Scholarships. The Carnegie Corporation, as a second step in its program of encouraging the study of art in the institutions of higher education, has recently released a number of carefully selected traveling art collections valued in all at $100,000. Among them are a set of textiles in 35 pieces dating from antiquity to the present. The previous step in the program was the granting of 27 scholarships to prospective teachers of fine arts. Both enterprises have been worked out through an advisory committee of distinguished artists and educators. Information regarding both collections and scholarship may be obtained from 522 Fifth Avenue, New York City.

Smallpox in the United States. The American Association for Medical Progress calls public attention to the fact that the United States is far behind Europe in the fight against smallpox, that a malignant form of the disease has been prevalent in various parts of this country for several years, and that in consequence an active campaign of vaccination should be urged on public health authorities, while legislative bodies should be urged to provide legal authority for universal vaccination.

CALIFORNIA

California Home Economics Association. Three important committees of the Council and their chairmen for 1926–27 are: Health education, Hilda Faust, University of California, *Berkeley Citizen* homemaking courses, Bertha Prentiss, Berkeley; Household chemistry courses, Agnes Fay Morgan, University of California, Berkeley. The Association is working for representation on the California Council of Education.

Southern Section. The annual Institute Session luncheon was held at the Elks Club Building in Los Angeles on December 23. Maud E. Hayes, president, was in the chair. Three hundred and fifteen home economics teachers gathered to hear Dr. L. Thomas Hopkins of Denver speak on modern trends in home economics curriculum revision. He urged courses which really fit the needs of the girl and strongly recommended home economics for boys.

Central Section. At a meeting in conjunction with the Central Section of the California Teachers Association, November 23, Dr. Morgan, president of the California Home Economics Association, spoke on the development and organization of home economics.

Northern Section. The regular meeting was held in Sacramento November 13 at the Hotel Sacramento. An instructive talk was given by Mr. E. Chappell on "Making more children worth while." It is hoped to secure state aid in making all crippled children useful citizens. Mr. Walter Murry, an interior decorator, gave a helpful talk on "Furnishing the home on a moderate income," and Mr. J. Oakley spoke on "Too much installment."

Richmond. The plate lunches served in the Roosevelt Junior High School for the past three years have proved financially and nutritionally successful. Four well-selected articles of food are served for fifteen cents, a sum which ordinarily would buy only three.

CONNECTICUT

Extension Service. Edith Mason, formerly state clothing specialist, has accepted the position of state home demonstration leader. Ellen Van Cleef is the new state clothing specialist. Frances Whitcomb of Springfield, Massachusetts, succeeds Miss Van Cleef as home demonstration agent in New Haven County.

Danielson. A department of vocational homemaking has been started in the new high school this year.

Hartford. The purpose of the Ingleside Club at the Weaver High School, to be of service to the needy, was well displayed in the Christmas bazaar given December 6 in conjunction with the Arts and Crafts Club. Fancy articles, candy, tea, and sandwiches were sold. The sixty-three dollars realized was turned over to the Hartford Community Chest. This annual bazaar gives the girls of the domestic science department practical application for their instruction, besides raising funds for charity.

The Morgan Gardiner Bulkeley High School was opened in September, 1926. Among the many student clubs organized is The Hearthstone, a club to which only art or domestic science students are eligible. The objects are to form a connecting link between home and school, to further interest in home economics, and to encourage better and broader social life. The club had a pleasant Christmas party with readings and sketches, a Christmas tree, and refreshments.

The Vesta Club of the Hartford Public High School undertook to fill Thanksgiving baskets for needy families in the city. The club collected from the faculty and pupils a little over $246 in money besides large

contributions of food, and from business firms other generous donations. Two hundred and sixty-one baskets were filled.

Mrs. Juanita Dean, head of the home economics department of the Hartford public schools, Elizabeth Nickerson of the Connecticut Department of Health, and Olea M. Sands of the County Farm Bureau gave regular talks on nutrition and food preparation over WTIC, of the Travelers' Insurance Company. Responses from every part of New England indicate an enthusiastic welcome for the service.

DISTRICT OF COLUMBIA

District of Columbia Home Economics Association. Some of the topics discussed at section meetings have been: "Consumer control of industry and the limit of that control," by C. H. Chase of the Institute of Economics, and "Electrification and its effects on the home," by Addison T. Cutler of the Brookings Graduate School, in the Economics Section; "Recent developments in the use of rayon," by F. L. Lewton of the National Museum, and "The meeting ground of school and commercial training in textiles," by Miss Reed of the Educational Department of Woodward and Lothrop, in the Textile Section; "Getting at the facts of nutrition with the help of laboratory animals," by Dr. Hazel Munsell of the Bureau of Home Economics, and "Calcium metabolism in relation to the development of teeth and bones," by Dr. Edith Hawley of the Bureau of Home Economics, in the Foods and Nutrition Section; "Recent trends in preschool education," by Anna E. Richardson of the American Home Economics Association and "Heredity," by Dr. Sewell Wright of the University of Chicago in the Child Study Section; "Investment of family savings," by Mrs. Edith C. Salisbury, president of the District of Columbia Home Economics Association, in the Homemaker's Section.

GEORGIA

State College of Agriculture, Athens. A scholarship loan fund for rural boys and girls in the freshmen class was raised by a campaign through the columns of the *Atlanta Journal*. Twenty-five scholarships of $200 a year were granted to students in home economics and about forty scholarships of $150 a year were granted to students in agriculture. Most of these will be duplicated next year.

The ninth annual winter collegiate course for home demonstration agents was held from January 2 to February 12. Journalism, home economics, and agriculture were offered.

State Normal College, Athens. Mrs. Pearl Campbell Moon is now in charge of the home management work. Mrs. Margaret Blair, who has been studying at Columbia University, has been appointed instructor in clothing to succeed Elva Kleist, who has been granted leave of absence for study. Mrs. W. E. Broach, who has been ill for several months, resumed her work as instructor of nutrition and dietetics in January.

Fulton High School. In November, the Home Economics Club enjoyed an interesting talk by Kathaleen Newton on "White rats." She left five rats for experimental use in the home economics classes. The Club appointed chairmen for the publicity, social, and pin and seal committees, leaving the chairmen to select the other committee members. At a club meeting on November 19, the program was on "The kind of woman I would not like to be." Each group gave a short skit showing the different kinds: the girl who makes appointments and breaks them, the girl who is never on time, the girl who is too conspicuous, the girl who brags about what she did, the woman who is always borrowing, and the woman who gossips over the telephone. A mock trial of a girl who gave coffee to the white rats was held at the next meeting.

Georgia State College for Women. Dr. M. M. Parks, president, met a tragic death in Tampa, Florida, on December 29, when he was struck by an automobile. Dr. Parks was a pioneer in establishing home economics at the Georgia State College and also established a department of health education.

ILLINOIS

Lewis Institute. The Home Economics Club recently made about forty dollars by a food sale and turned the money over to the home management house for additional equipment. This quarter, in cooperation with the Lewis Players, the club has planned to earn money for furnishings in the model apartment, which may be loaned occasionally to the Players for stage settings.

Among graduates of last June some are in institutional work as student dietitians one is working in a commercial food laboratory, while another is doing lecture demonstrations for newspaper cooking schools.

The School of Domestic Arts and Science conducted a homemakers' conference January 19 to 21 at its North Branch, 350 Belden Avenue. Mrs. Smiley Blanton, of the Child Guidance Clinic, Minneapolis, discussed "The truth as your child sees it." Dr. David Snedden, of Columbia University, gave two talks: "Salvaging the American home," and "Needed—a new cultural home economics." Dr. Mary Swartz Rose, of Columbia University, also gave two talks: "Getting Acquainted with our foods," and "Contributions of nutrition research to child welfare.

University of Illinois. A chapter of Phi Upsilon Omicron was installed early in December. Ruth Lindquist of Iowa State College and Doris Resley of the National Council were in charge.

IOWA

Iowa State College. The home economics program for Farm and Home Week was developed about the topic, "The home without static." Among the speakers were Lita Bane, president of the American Home Economics Association, on "New horizons in homemaking;" Mrs. Mildred Weigley Wood, of Phoenix, Arizona, who brought the combined viewpoint of the progressional home economist and the homemaker and mother; Harriet Goldstein, University of Minnesota; Dr. Amy L. Daniels, Iowa Child Welfare Research Station; Mrs. Pauline Deavitt, State Board of Education; Dr. James Wallace, State Health Department; members of the college staff, and Iowa homemakers.

Much interest is shown in the Applied Art Club, the membership of which is made up of faculty and students from all divisions of the College. The function is to encourage greater appreciation of art in daily living; to encourage creative talent; to make it possible for groups of students to work together in their major interest; and to give exhibits. Among groups organized are those for ceramics, crafts, block printing, hand-decorated te..tiles, and interior decoration.

The homemakers' unit courses, organized in 1922 with one unit and an enrollment of eleven local women, has expanded to fourteen units and an enrollment of over a hundred women. Thirty-two of these are from out of town. There are three evening classes. The present plan is to encourage the enrollment of young women who are unable to take a four-year course but who are planning soon to become homemakers. The plan also includes one-week courses in home management, family food problems, art for the home, and clothing selection and construction for homemakers who cannot be away from home for the three-month period.

KANSAS

Kansas Home Economics Association. The annual spring meeting will be held in Topeka, probably the latter part of March. The program of work for the past two years has been devoted to helping improve home economics instruction in the high schools and to that end a tentative course of study has been worked out, based upon modern family life, with organization and method in line with the best educational and scientific thinking, and planned to fit the needs of the girl of today.

Kansas State Teachers College, Pittsburg. Kathryn Horst is on leave of absence, studying for her doctor's degree at Yale University.

Student teachers of home economics may now include their work as sponsors of student activities in the junior and senior high schools in their student teaching.

The Home Economics Club is making quilts and hooked rugs to earn money to meet its subscription to the Ellen H. Richards fund and to buy furnishings for the home economics office.

The home economics department, in cooperation with the Girl Scout Council of Pittsburg, gave a training course for scout leaders February 25 to March 5. Ann Roose from national Girl Scout headquarters directed the work.

Household administration is now being taught in a modern eight-room house on the campus; the remodeling and furnishing were completed last fall.

The students of the clothing classes have put their instruction to practical test by choosing a few of the most interesting dresses made in class, selecting the proper accessories, hats, and underwear from the stock of a local store, and arranging them all as a window display.

Eta chapters of Phi Upsilon Omicron has plan under way for Founders Day, when many alumnæ are planning to return. Eta Actice chapter sold Christmas fruit cakes to help meet the chapter expenses of the year.

Kansas State Agricultural College, Manhatten. Various practical health experiments are being carried out by the hygiene and home nursing classes. In one of these, about 50 per cent of the class were found not to get enough sleep, exercise, and rest. Each girl in the class now keeps a weekly record of her food and sleep, is weighed once a week, and has an occasional health conference with the instructor. At the end of each month, note is taken of the relation between the habits of food and rest, and weight.

The food economics and nutrition department conducts a foods clinic on Friday afternoons, with Dr. Margaret Chaney in charge. Often food exhibits are displayed by groups of dietetics students. Among those who come frequently for conferences on diet or foods are students and mothers of infants and preschool children.

Extension Division. Irene Taylor, for some time home demonstration agent in New York, has returned to fill the place of Loretta McElmurry, clothing specialist, who is on leave of absence this year.

May Miles has been appointed household management specialist in the place of Mrs. Harriet W. Allard, who has resigned to become director of the testing plant of the *Household Magazine.*

Edna Bender, formerly county club leader in St. Louis County, Minnesota, is now assistant state club leader in Kansas.

W. Pearl Martin, specialist in home health and sanitation, has recently been appointed by Governor Paulen on the state board of examination and registration of nurses.

A project called "Music for the family" has been prepared by Amy Kelly, state leader of home economics extension, assisted by Fannie R. Buchanan, of the educational department of the Victor Talking Machine Company. It includes five units, each having a song, a listening number, and a game.

Ethel McDonald, home demonstration agent of Bourbon County, has gone to a similar position in Oakland County, Michigan. Her place has been filled by Martha A. Rath of Brown County, South Dakota. Frances Smith, home demonstration agent in Cherokee County, has gone to Flat Head County, Montana.

LOUISIANA

Louisiana Home Economics Association. The Association held one of its most successful and best attended meetings in conjunction with the State Teachers Association in Alexandria on November 18 and 19. The principal speakers were: Helen Goodspeed, of the University of Arkansas; Emily Huger of Southwestern Louisiana Institute; Mrs. Mary Drago Durrett of Louisiana State University; and Dr. H. D. Kitson, of Columbia University. The officers for the year 1926–27 are: Mrs. Mary Drago Durrett, president; Esther Cooley, vice-president; Dorothy M. Kidd, secretary-treasurer; Clyde Mobley, councilor.

In appreciation of her untiring zeal in furthering the cause of home economics in the state, a life membership in the Louisiana

Home Economics Association was presented to Helen Graham of Louisiana Polytechnic Institute by a group of twenty-five teachers of home economics who were formerly her pupils.

Louisiana State University. The extension department has suffered a great loss in the death of Norma Overby, state home demonstration agent for the past seven years. She was fatally injured in an automobile accident near Knoxville, Tennessee, in August. Mary Jessie Stone, who succeeds Miss Overby, was director of vocational home economics methods and home demonstration methods in George Peabody College, and previous to that, district home demonstration agent in Texas.

Louisiana Polytechnic Institute. An interesting short course for clothing teachers was carried on for five days before the opening of the Louisiana high schools by Emma L. Clause, who had spent three months in Europe travelling and investigating clothing problems. The course consisted of lectures and demonstrations and was so popular that it will be further developed for another year.

Louisiana State Normal College. To succeed Mrs. J. C. Hazzard (Jane Rice) as head of the home economics department, Grace Dexter, a graduate of the University of Indiana, has been appointed. Esther Cooley, from the University of Indiana, has replaced Bess Henderson, now studying at Columbia University.

Southwestern Louisiana Institute. Louise Lahr, a graduate of Lewis Institute and Columbia University, has succeeded Mrs. Blanche Taft as director of home economics education. The director of clothing and textiles is Agnes Brady, of Columbia University.

MAINE

Extension Service. Estelle Nason, leader of the Extension Service, reports that home economics extension plans are to be made for 1927 at the community-planning meetings held in each of the 285 towns where groups of women have organized for instruction in home economics subjects. Women continue to be much interested in the clothing project, especially millinery, and every county has this as a part of its plans. There is increasing interest in such lines of work as the improvement of kitchens, renovation of furniture, and better arrangement of home furnishings. Evidence also shows that women are more interested in learning how to keep their families well and how to provide proper food for the family.

Motion Pictures of Home Economics. Home Economics work in day and evening schools in Portland, Sanford, Rumford, and Bath will be shown in the films which the Federal Board for Vocational Education is to prepare for distribution over the United States.

Nasson Institute. A home management apartment has been fitted up on the first floor of Glidden Hall, a small dormitory. It has a living room, a dining room, kitchen, six bedrooms and a bath, quite separate from the rest of the dormitory. The bedrooms were already furnished. A class in interior decorating planned the furnishings for the other rooms, did the shopping, made the draperies, cushion covers, table linen, and refinished an old dining room set. A new oil stove, an oven, and a set of silver were given by local merchants. Generous amounts of money were given by the Springvale Women's Club, the Springvale-Sanford Nasson Club, and the Massachusetts Nasson Club, and other friends. The balance needed was supplied by the school. The eight girls in the class do all of the work in six weeks besides attending their other classes. The work is divided among the girls as it might be in a home, and teaches them the value of cooperativeness, a sense of responsibility and initiative. It is also planned as a check or review of all their home economics work.

Mary Schenck Woolman, who was the donor of many books in the library, has recently made another helpful contribution from her collection of illustrative textile material; six boxes of cotton, linen, wool, and silk materials; some rare silks from Egypt, India, and Lyons; and some cloth that may be cut for samples. Everything

is marked to show costs, date of purchase, and whether it is pure or adulterated fabric. Throughout the year Mrs. Woolman has sent reference books fresh from the press for textile and art work and has taken time to visit and talk to the students.

Farmington Normal School. Lillian Gates, Simmons '18, Columbia '26, is teaching foods and chemistry. Amelia Wicke, Framingham Normal '23, is teaching clothing and allied subjects.

Ruby Philips, a teacher in the American Girls' School in Ahmednagar, India, addressed the home economics students on "Girls in India and the teaching of right living to the Indian girl."

At the October meeting of the Home Economics Club, Alfreda Skillin brought a message from the meeting of the student club committee of the American Home Economics Association at Minneapolis. In November, four of the Department students who had attended the State Teachers Association at Bangor, gave the high lights of the home economics section meetings. Thanksgiving boxes were prepared for needy families. The December meeting took the form of a Christmas party where twenty-five deserving children were made happy by Santa Claus and a real tree.

MARYLAND

Maryland Home Economics Association. The fall meeting was held in the Gwynns Falls High School on November 26. The Association united with the State Vocational Association at luncheon and enjoyed an address by Dr. C. A. Prosser, director of the Dunwoodie Institute, Minneapolis. At the regular business meeting of the year in the afternoon, the following officers were elected: Rowena Holdren, president; Edna Engle, vice-president; Martha Thomas, secretary; Ida Wholey, treasurer.

Conference for Home Demonstration Agents. At the annual conference held under the direction of Venia Kellar, state leader, at the University of Maryland, January 18 to 21, inclusive, 21 home demonstration agents were present. The program centered around the achievements for 1926 and the projects to be carried on in 1927. Gertrude Warren spent two days at the conference. Her talk on "New developments in girls' 4-H Club work" was of real inspiration and value in planning club work. The clothing and nutrition projects were definitely outlined by the specialists. In connection with the clothing project a talk was given on planning your wardrobe on a budget by the clothing director from one of the largest department stores in Baltimore. The last forenoon meeting was devoted to a discussion of goals for 1927 and administrative problems. Three joint meetings were held with the county agents.

MASSACHUSETTS

Union Agricultural Meeting, Worcester. One section was devoted to an all-day meeting for homemakers. Mrs. Evelyn Tobey of Teachers College spoke on millinery and May Foley, state nutrition specialist, gave a lecture-demonstration on nutrition in its relation to health.

Massachusetts Agricultural College. Mrs. Annette Herr, formerly of Teachers College, Columbia University, has been appointed to succeed Lucile Reynolds as state home demonstration leader.

Esther Davies of New York City has been appointed assistant professor of research in home economics to continue the study begun last year of food habits of school children in relation to their health.

New England Dairy and Food Council. Material for lectures, moving-pictures, exhibits, and literature on various subjects is furnished by the Council free of charge in Greater Boston and at a small charge elsewhere.

Malden Public Schools. Nutrition is being incorporated into the curriculum in the following ways: A health habit program, with regular weighing and measuring, in the first seven grades; a milk lunch in practically all schools; health teaching in junior and senior high schools; home nursing with emphasis on correct diet in junior high schools; special attention for undernourished children.

"Homemade Isn't Always Best"

"Homemade Isn't Always Best", is the heading of an editorial in the *Woman's Home Companion* for December last.

After stating that the country used two and a half billions of pounds of soap last year, the editorial points out:

> Instead of millions of tired housewives laboriously cooking soap in their own kitchens, there are now twenty-five thousand pairs of hands, employed by two hundred and seventy manufacturers, turning out enough for everybody, and better soap, too.
>
> Meanwhile the laundry industry has grown to the point where it does a business of five hundred millions—an expansion of five hundred per cent in the past sixteen years. It now has one hundred and twenty thousand workers, who serve more than two million families.
>
> Two simple examples of the achievements of the Industrial Age in lifting burdens from the individual home.

The modern woman is learning to make life less a struggle, more a joy and an adventure, just as man learned to do years before her.

One of the results of her emancipation is her intensive thought on Home Life, as shown by the American Homes National Congress at Des Moines, Iowa, March 8-11 inclusive, under the auspices of the General Federation of Women's Clubs, of which it is a privilege to speak here.

Our Mr. Geo. H. Johnson, of the Mellon Institute, Director of our Department of Research, will speak at the Congress on the textile problems of the home, and we hope many readers of the *Journal of Home Economics* will make themselves known to him.

Yours for better acquaintance,

LAUNDRYOWNERS NATIONAL ASSOCIATION OF THE UNITED STATES AND CANADA

Headquarters: LaSalle, Ill.

Forsyth Dental Infirmary, Boston. The food and habit clinic is conducting work in preventive dentistry, including home visits after dental work is completed especially if children are underweight or if their teeth indicate nutritional defects; advice on pre-natal diets; general health education in the waiting room, with pictures, exhibits, and short talks; training in dietetics in the course for dental hygienists.

MICHIGAN

Michigan State College. The five-year course in home economics and nursing is proving so satisfactory to the Michigan Nursing Association that they have suggested a course in hospital administration, and plans are being made to give a six-weeks tryout course during the summer session of 1927.

On January 1, Michigan State College began a correspondence course to include economics, home economics, and sociology. Material for the new course will cover the equivalent of a four-hour course for one college year.

Northern State Normal School, Marquette. Olga Hoesly, formerly state supervisor of home economics in Wyoming, is the new head of the department of home economics.

Michigan State Normal College. The midyear educational conference was held January 14 and 15. The home economics department arranged an interesting section meeting at which Dr. E. Leona Vincent of the Merrill-Palmer School gave a talk on the preschool child, and Cora May Walton spoke on mental tests for the growing child.

Detroit. The Union Trust Company will award five $1000 university scholarships to the winners in their annual essay contest on the subject, "The Family budget: what it is and what it does." The contest is open to all seniors in the high schools of Wayne and Oakland counties.

MINNESOTA

University of Minnesota. The annual Farmers' and Homemakers' Short Course was held from January 17 to 22. The feature of the program was homemakers. Mrs. Mildred Weigley Wood of Phoenix, Arizona, formerly chief of the division of home economics, gave a series of lectures. Mrs. Robert Dahlberg, an alumna of the home economics college, gave a report of the farm conference held in Chicago last year. Mrs. Ripley and Mrs. Lucile Grondahl King are other homemakers appearing on the program, which also included Mrs. Chase Going Woodhouse of the U. S. Bureau of Home Economics.

Members of the Division of home economics are broadcasting a series of talks on homemaking topics over the University radio.

Women's Occupational Bureau, Minneapolis. Mrs. Chase Going Woodhouse of the U. S. Bureau of Home Economics, spoke on January 18 at a joint session of the Women's Occupational Bureau and the College Women's Club of Minneapolis. The Bureau is arranging to analyze home economics vocations represented by the Twin Cities. Mr. Stead of the School of Business, University of Minnesota, will supervise this study, assisted by an advisory committee of home economists.

St. Olaf College. The classes in foods have done some work with the Saxigaard Cabinet, an electrically heated steam cooker used in institutions and private homes in the Scandinavian countries. It is convenient and the cooked foods retain their flavor but it may be expensive to operate where electric rates are high.

The department of textiles has received a number of samples of handwoven materials showing typical Norse designs and vegetable-dyed yarns. The students have designed and made the costumes for the play given by the English and Norse departments.

Anna Drotning, head of the department of home economics, spent the summer travelling in Europe.

Carleton College. Anne Walker, superintendent of the men's dormitories, is absent on leave during the second semester to continue her study in dietetics and institutional management at Columbia University.

A course in budgeting has been offered in

Easter Bunny Cake

YOUR younger pupils will just adore "The Comical Cruises of Captain Cooky." The story is told in rippling rhymes. It is profusely illustrated in color and contains some excellent recipes for children, such as Easter Bunny Cake, Merry-go-round Cake, Biscuit Tarts. It is free for the asking. Like all the other cake recipes which the Royal Educational Department recommends for children, Easter Bunny Cake is delicious but not rich.

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the home economics department this year by Dr. Marion White of the mathematics department, who studied under Dr. Hazel Kyrk at Chicago University during the summer.

Mrs. Chase Going Woodhouse, of the U. S. Bureau of Home Economics, visited the college in January.

MISSISSIPPI

Mississippi Home Economics Association. The first news letter of the year went out from Miss Wilson's office in December. It contained the program of work for the year, news from student clubs, a brief article by Mrs. Spurlock on the educational value of school cafeterias, an appeal for membership by the secretary, Anne O. Jordan, a report on food habits of Mississippi people by Dorothy Dickins, and a few news items.

At an executive committee meeting at A. & M. College, January 13, it was decided to provide for the various sums needed during the year by making each section responsible for raising the money for special items.

The Extension Section spent ten days in January at A. & M. College studying the year's program for home demonstration. The Extension Section for the Middle District has already 100 per cent paid-up dues for 1927.

A dietary survey of 18 Mississippi hospitals of 25 beds or over, conducted by a committee of which Mary E. Doney was chairman, showed that 7 had organized dietary departments; 6 had general food service; 11 had house and special diets; 9 had teaching departments; 11 had therapeutic diets. Five had graduate dietitians in charge, 2 of these also graduate nurses; 4 had graduate nurses in charge; one had a graduate nurse assisted by a housekeeper and another had a graduate nurse assisted by the steward; 3 had stewards and 4 had housekeepers in charge. In 6, the buying was done by the superintendent; in 3, by the superintendent and a trained nurse; in 1 by the superintendent and a steward; in 1 by the superintendent and the business manager; in 2 by the housekeeper.

A. & M. College. Mrs. Mary Sue Gesell has come from Texas to take up the work of food specialist in the extension home economics department.

Whitworth College. The home economics students reorganized the club in October, 1926. The following officers were elected: Katherine Sells, president; Annie Neva Bell, vice-president; Shirley Davis, secretary and treasurer; Carrie Lee Byrd, club reporter; Inez Smith, chairman program committee; and Anna Maxie Thompson chairman social committee.

The home economics students are very proud of their new practice home. On November 15 six girls entered the practice home for a six-weeks course in household management. Velma Thompson, a senior in home economics, was the first hostess.

Each class has one room to call its own and since the opening of school, the girls have raised funds enough to furnish them according to their own taste, which has made them very attractive and homelike.

Mississippi State College for Women. The Home Economics Club has enrolled 210 members. The purpose of the club is to create a wider interest in the advancement of home economics on the campus and throughout the country, to promote fellowship and cooperation, and to develop an appreciation of art and culture. The club meets once a month. At the November meeting, Professor Painter of the English department entertained the club with readings of southern poetry. Students in the music department gave club songs and special numbers. At the December meeting, Lois Fisher of the art department spoke on art appreciation.

State Teachers College. Loyette Webb who spent last year studying in New York, has returned and is now head of the home economics department.

Belhaven College. May Haddon is in charge of the home economics department.

MISSOURI

Missouri Home Economics Association. At the annual meeting held November 12 at Kansas City in conjunction with the State Teachers Conference, the following

officers were elected: president, Mabel V. Campbell, University of Missouri; vice-president, Ella Moore; secretary-treasurer, Virginia Richeson, Cleveland High School, St. Louis. Reports from student clubs formed an interesting part of the meeting.

Extension Service. The clothing department reports much interest in glove making, which is taught by trained leaders. An exhibit of shoes suitable for rural use is being prepared.

Vocational Home Economics. The four-fold program, promotion of adult education interest in problem-solving methods, related subjects, and child care work, was carried on through five regional conferences of vocational teachers held between January 28 and March 1.

University of Missouri. Dr. Margaret C. Hessler, recent instructor in foods and nutrition in Teachers College, Columbia University, has been elected assistant professor of foods and nutrition in place of Hannah Stillman Bradfield, resigned. Mrs. Bradfield is continuing her work toward her doctor's degree at the University of Missouri.

The Home Economics Club has many varied activities. A group is working with the Public Welfare Association in making food, clothing, and shelter budgets for Columbia people based on Columbia prices. Another group is doing nutrition work with negro children.

Green Ridge High School. A Bachelor's Club of junior and senior boys has been formed under the direction of Florine C. Allen. It has the same constitution and is following the same plan of work as the Bachelor's Club of Ava, described in the JOURNAL for April, 1926. Mrs. Lena Johnson Thomas, sponsor of the original Bachelor's Club, assisted Miss Allen.

MONTANA

Montana State College. The twelfth vocational congress for high-school girls convened at the College November 18 to 20. Two honor student seniors were delegates from each high school.

Herrick Hall, the new women's building, was formally opened on January 8, the Associated Women Students acting as hostesses to several hundred guests.

Florence Hall, milk utilization specialist of the Bureau of Dairying, U. S. Department of Agriculture, was in Montana in September and November, helping with the Yellowstone and the Lewis and Clark "Milk for Health" campaigns.

Miriam Birdseye, nutrition specialist, of the U. S. Bureau of Home Economics and the Office of Cooperative Extension, was in Montana in November for conferences and meetings with extension workers and members of the resident teaching and experiment station staffs.

Of the forty 4-H Club members and their leaders who attended the International Live Stock Show and Fifth National Boys' and Girls' Club Congress at Chicago, 19 were girls under the supervision of Miriam Hawkins, Montana state home management specialist, and M. Vangel Russell, assistant state club leader. Four-H Clubs in Montana averaged over 85 per cent in completing their year's projects.

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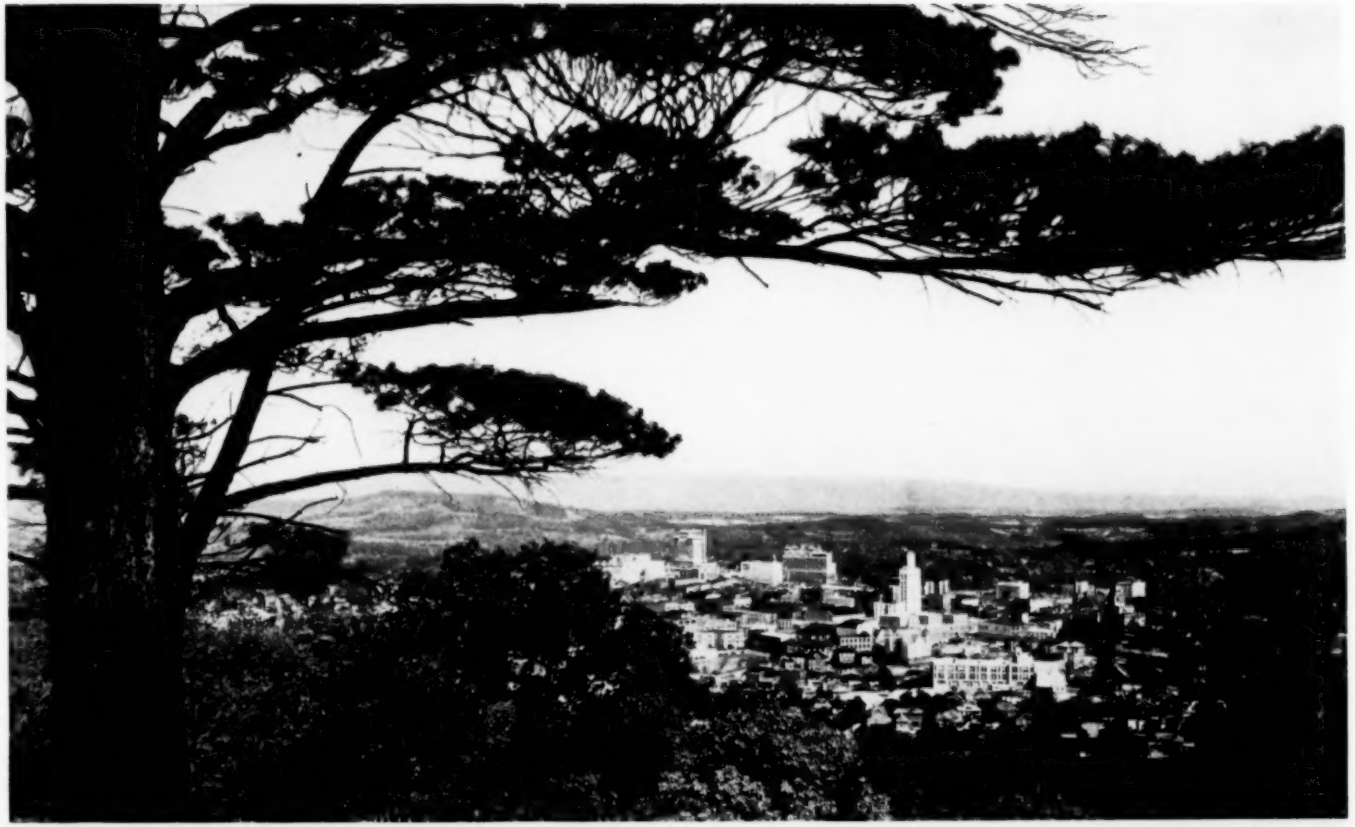

Courtesy of the Asheville Chamber of Commerce

ASHEVILLE, NORTH CAROLINA, WHERE THE AMERICAN HOME ECONOMICS ASSOCIATION WILL HOLD ITS ANNUAL MEETING, JUNE 21 TO 27, 1927